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THE MAGAZINE OF ADVENTURE GAMING


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## In This Issue

As you can see, we've added 8 more pages to this issue. We'll keep to the larger size as long as we get enough advertising to support it. Right now, it's looking very good.

This issue focuses on play-by-mail games. We've got PBM rules for Starship Troopers and WarpWar; a discussion of "Fantasies by Mail"; David Bolduc's reviews of four play-by-mail outer-space games; and a company report from Schubel \& Son, moderators of The Tribes of Crane.

We've also got a new GEV story, and a three-player scenario to go with it . . . including two new units.

And, starting this issue, a new feature. On page 40 you'll find the first installment of "The Good Guys," a new cartoon strip by J.D. Webster. J.D. is the creator of The Dragon's "Fineous Fing. ers." Now he's taking a twisted look at Star Wars, Traveller, and the universe in general. Hope you enjoy it.
-Steve Jackson

## THE SPACE GAMER

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THE SPACE GAMER (ISSN 0194-9977, USPS 434-250) is published monthly by The Space Gamer, 7207 Onion Crossing Dr., Austin, TX 78744. Second class postage paid at Austin, TX. POSTMASTER: Send address changes to The Space Gamer, P. O. Box 18805, Austin, TX 78760.

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Printed in U.S.A. by Futura Press, Austin.

| Subscription rates, effective $5 / 15 / 80$ |  |  |  |
| :--- | :--- | :--- | :---: |
|  | US | Canada | Other foreign |
| One year | $\$ 21$ | $\$ 24$ | $\$ 41$ |
| Two years | $\$ 39$ | $\$ 45$ | $\$ 79$ |
| Lifetime | $\$ 250$ | $\$ 260$ | N/A |

Lifetime $\$ 250$ ill prices are in U.S. dollars; payment must be in U.S. dollars.

# Where We're Going 

The first order of business: feedback. Our big reader's survey will come up in a few months, but I'd like to get some comments now. The question: What would you like to see in the extra 8 pages per issue, now that we've got them?

If you would, drop us a letter or card. Answer any way you want - but here are a few choices. The results will be easiest to tabulate if you'll simply reply with the two or three categories of material that you'd like to see more emphasis on.
(1) Reviews
(2) SF scenarios and variants
(3) Fantasy scenarios and variants
(4) BOTH fantasy and SF scenarios and variants
(5) Fiction
(6) Computer gaming
(7) Articles on strategy and theory

And one more question, while we're feedbacking. This is The SPACE Gamer; we've always stuck pretty close to $s-f$ and fantasy gaming. I'm inclined to keep to that - in spite of the fact that some of the new games we're publishing are not $s-f$ or fantasy. But is that what you want? So here's a multiple-choice question. Which of these would you most agree with:
(1) I want TSG to stick strictly to s-f and fantasy gaming.
(2) I might like to see an occasional article - never more than one per issue - dealing with historical/ modern games published by Steve Jackson Games.
(3) I'd like to see wide coverage of anything done by Steve Jackson Games.

As I say, I'm betting that most of the responses will be Number 1, with a few Number 2. But please drop us a card. If you tell us what you want, we don't have to guess.

## Games Progress Report

As of this writing, the new games are coming along very well. At this moment (and remember, I'm writing this in early October, nearly a month before you'll read it), CARDBOARD HEROES, ONEPAGE BULGE, and KUNG FU 2100 are at the printers. RAID ON IRAN should
join them soon. (Everything considered, those of you who have already ordered games for first-class delivery may get those games before you read this magazine.)

It's still too early to think much about a second batch of games. There will be more Cardboard Heroes, for sure . . . Denis is already working on a set of orcs, goblins, and human-type ruffians. Possibilities for later \$3 games include COUP (one player is the Great Leader, and the other tries to overthrow his government) and a tactical space game.

## Poster Offer

Thanks to all of those who returned the cards in last issue. We were (and are) offering a free "Demon" poster to anyone sending us the name of a retail game/ hobby store for our lists (as long as we didn't already have them on the lists!).

The response has been good. Naturally, there were a lot of duplications. I'm sorry we can't acknowledge those. But if you did get in first with a store, your poster went out within a couple of days - so you won't have long to wait.

That offer remains open; too. If you know of a shop that sells games or fantasy magazines, write us and let us know. If you're the first to tell us about that store, you'll still get a Demon poster. Use the card from last issue, or just write us a letter.

## Special Offer - Subscribers Only

Those of you who subscribe to TSG are already eligible for free postage on your game orders, and discounts when you buy back issues. Here's one more "perk" for st- bscribers.

Any TSG s bscriber who sends us one or more new subscribers will get two issues added to his own subscription for each new subscriber he sends us. An exsubscriber whose subscription expired with no. 27 or before will count as a "new" subscriber if you can get him to re-subscribe. Those who expired after 27 don't count as new.

The details are on the back of your

## NEXT ISSUE

December will be our miniatures issue, with a survey of miniatures companies, a company report by Martian Metals, and designer's notes for Cardboard Heroes. Also: Artifact designer's notes and expansion rules.

The winner of the Wish Contest. And, as always, lots of reviews.
subscription mailer cover. If you don't have a mailer cover on your magazine, it's probably because you're not a subscriber - so this doesn't apply to you.

## Advertising

Want to help us get advertising? You can. Our advertisers (quite sensibly) want to put their money where it has the most effect. If you make sure to let them know you saw their ads in TSG, they'll know their ads are worthwhile. So - when you order from one of our advertisers, mention TSG. Maybe we can add some more pages!

-Steve Jackson

## GAME <br> MASTER

Lots of questions on TFT this month. For our answers, we are indebted to Metagaming's Guy McLimore, new editor for the TFT game system.

If a figure takes five hits of damage in one incident, and a physicker heals two of the hits, can the same physicker heal two more hits if given another five minutes?

If the same figure gets one more hit in a later incident, can a physicker heal two more hits, or just that one?

Under "Reactions to Injury" in Advanced Melee, the rule says that a figure that takes five or more hits is at -2 DX for the next turn only. Does this mean that the figure is at -2 DX for the remainder of the present turn and the following turn?

> -Roger Banks

1: A physicker can heal only two hits of damage from an immediately preceding combat, given five minutes to work on his/her patient. An additional five minutes cannot be used to heal more wounds on the same patient.

2: A physicker can heal only damage just received and not yet treated. If a character has received five hits in combat, the physicker can immediately take five and heal two of them, leaving three. If later the same figure is injured again for one more point, the physicker can heal that one point in five minutes, but NOT heal an additional point (making two) from among the three earlier received.

3: Taking five or more hits reduces DX by 2 through the next action phase of the figure, no matter what turn that action phase comes on. In the second subsequent action phase, he is back to normal.

After reading In the Labyrinth, Advanced Melee, and Advanced Wizard and playing several games of Death Test, I have some questions.

1: When the berserker frenzy ends, the berserker immediately loses 2 ST . Is this merely a fatigue wound which time and rest can heal? If not, can these wounds be healed by a Physicker or Master Physicker?

2: When a flying creature falls, it takes 1 die damage for every 5 meters it falls. Is this dam-
age figured without considering the amount of body armor the creature has? What about the rider - does he also take the same amount of damage? Does it also exclude whatever armor HE was wearing at the time?

3: How heavy a sword can be used while also using the Fencing talent?

4: Can a human-sized flying creature choose the Dodge option while still in flight - assuming it moved $1 / 2$ its MA or less?

5: When using the optional Crippling Hits rule, if a hit of $3,4,5$, or 6 is made and then no damage accompanies the blow, do you still roll to see if a crippling effect is made? (It seems extremely unlikely that a character would be crippled by a hit that did him no physical damage.) Also, is it possible to cripple a foe of greatly disparate strengths; i.e., a man vs a 30 point giant? a 40 -point giant? a 60 -point giant?

6: If a defending figure is surrounded by four or more figures, does he defend against all attackers equally - a 4 die DX roll - without having to choose a facing? Or must he choose some facing before he defends, in which case, those figures not in his front hexes would not be affected by his maneuver and would strike with DX add-ons using only 3 dice? Can a totally surrounded figure choose the defend option at all?

7: Can a figure choose the defend option if his only ready weapon is a shield? How about a spike shield?
-David Lee Wagner
1: Yes, the berserker frenzy ST cost of 2 points is due to fatigue and hence it "heals" in a manner similar to the regeneration of ST loss due to spellcasting.
2. Body armor does not protect against damage done in a fall. A figure that is riding a flying creature takes damage the same way as a natural flyer in a fall, as does anyone or anything falling from a height.

3: ITL does not specify any limitations on how big a sword may be used with Fencing skills. For now, any sword may be used, though we may want to get more specific in later TFT modules, as skill with a light sword (rapier, cutlass, or shortsword) is MUCH different than skill with a heavy sword (broadsword, bastard sword, great sword). GMs who wish extra realism may wish to experiment with making the normal Fencing skill only applicable to the lighter weapons, with a similar but separate talent for the heavy stuff. (Let me know how it works out ...)

4: ANY flying creature may dodge in flight if it moves $1 / 2$ its flying $M A$ or less EXCEPT during the turn it takes off, when it must move no more than $\%$ of its MA to dodge.

5: When using the optional rule, a crippling hit cripples even if the normal damage roll brings no damage once adjusted for armor, etc. Sometimes even a normally non-damaging blow can injure badly if it is struck in just the right place. I would allow no crippling hit, however, if the victim's armor or magical protection makes it impossible for an opponent to hit him at all, but with the automatic hits provided in the rules for certain rolls, this situation will be rare.

Crippling hits should be possible on giant foes, but they won't be as easy to score. If the defender is more than twice the attacker's ST rating, and is at least two hexes larger than he is (a man vs a giant, for instance), roll for a crippling hit only on a to-hit roll of 3 or 4. If the defender is over THREE times the attacker's ST and is at least four hexes larger flike a man vs a 7-hex dragon), a crippling hit should be rolled for only on a roll-to-hit of 3 . Otherwise,
use the normal rolls, No matter how big or strong an opponent is, a to-hit roll of three should give you a chance to cripple him. (Once again, though, no crippling hits if the opponent is simply impossible to injure . . .)

6: The Defend option is useful only against foes in a figure's front hexes. A figure who has two foes in front of him and one to his side may choose the Defend action and the two in front will need 4 -dice to-hit rolls. The one to the side, however, will make the normal 3-die adjDX roll to hit. You also cannot defend $A T$ ALL without a ready weapon or shield. This ties right into.

7: Yes, a figure can defend with only a shield, spike or otherwise. As a matter of fact, that's about all a figure with a normal shield CAN do, short of a shield rush, to keep from dying . .

1: On pages $14-15$ of ITL, Monster Followers I requires 2 dice per 10 ST points, while MF II requires 2 dice per 8 points. Shouldn't that be reversed? After all, the ability to "convert" more powerful monsters should also make it easier to "convert" less powerful ones.

2: At what ranges do you use the Dagger Marksmanship rules for a whip? Also, what DX roll should a character make to deliberately unwrap his whip and draw it back - or keep it wrapped, if that's what he wants?

## - Richard Parsons

1: I think the ST ratings for the IQ saving throws on Monster Followers I and II are possibly misprinted. Try it with BOTH being 2 dice for every 10 ST the monster possesses, so that the only difference in the talents is how high is the IQ of the monster you are trying to impress.

2a: You may use Dagger Marksmanship rules for a whip at any range that the whip is effective at $-3,4$, or 5 hexes away.
$2 b$ : Maybe a whip will stay wrapped, maybe not. This is a very fine point, and for now, I'd prefer to leave it to the individual GM. Perhaps we will get into more detail here later.

Task Force Games' Asteroid Zero-Four has an apparent contradiction in the rules:

Rule Section 7.3 states "An Engineer unit is considered to be below the surface if it is in any hex which contains any part of a tunnel symbol, and the hex has taken eight or fewer damage steps."

But Table 11.4 - Damage Effects - under "5-8 Damage Steps" states "System cannot function. Electrical power cannot be transmitted through such hexes, and Engineer units cannot move through them (by subsurface movement)."

So which is it? Is an Engineer unit in a tunnel hex which has taken 5-8 Damage Steps above or below ground?
-Steve Winter
No reply received from Task Force Games, (Come on, guys! You've got FANS out here . . .) However, rule section 7.22 states!' "When using sub-surface movement, the cost to enter any hex which has taken 4 or less damage steps is one movement point. The cost to enter any hex which has taken from 5 to 8 damage steps is two movement points. Any hex which has taken more than 8 damage steps may not be entered by sub-surface movement.'"

Therefore, the safe assumption is probably that the text of the rules is correct, and that the table is in error.

# END <br> GAME 

## by J. D. Bell

I woke before sunrise. The wind gently shifted the pines. It toyed with the burn dressings on my arm. Nothing else was moving but the river, water speckled with dead leaves. Above, the sky was innocent of clouds or contrails. The only air cover was a late night bird, sleepily returning to its roost. By my watch it was six hundred hours, the two-thousand five hundred and sixth day of World War III, my twenty-sixth birthday.

I went over to the laager and took a tin of hot afrika coffee from the fire. Then I climbed into the command hover. Jan was on watch, listening to three bands and catching the readouts on five more. I tapped her shoulder.
"Any luck?" She shook her head and returned to the screens.

Denys was strapped to a bunk nearby, in case we had to lift and run. We had taped his hands to keep him from picking the scabs in his sleep. His head was naked as an egg. There was a raw patch of grafted skin where his ear had been. When we stripped the comhelm off him, a lot of flesh had come with it.

Outside, Major Willovs squatted at the fire, warming flesh chilled by night recon. Her face was still striped with nightpaint. Her hair was greased into a long braid, wrapped into a plastic sheath. I sat beside her and finished my coffee.
"Anything stirring?"
"Nothing, colonel. Spent half the night sneaking up on a village about ten klicks this side of Viella. Nothing but corpses. Forty in the streets. No IR traces."

Absentmindedly she rubbed a sore on her cheek. It made me wonder how long we would last, camped out like this with

our wounds and our rad dosages, with food low and winter closing in.
"A standing village. Any fighting there?"

She shrugged. "A few signs. A wreck in the square. A few houses gutted."

The fire popped. I scratched a rash under my belt. "We ought to check it out. If there isn't a lot of rad or toxin, we could set up there till spring."

She shrugged. "Colonel, if you ask me, one grave is as good as the next."

That didn't sound like Willovs. Too much night recon, I thought.
"Pack it in, major. Sleep till noon."
"Yes, sir!" She lay down where she sat and was out like someone had drugged her.

I sat a little longer by the fire, listening to the familiar, little noises of the waking laager. I was thinking about our six years in the hovercraft, living in a six cubic meter can for weeks; watching friends disappear in eye-burning flashes; huddling in our cans at night with the MI around us, waiting for Alliance commandos to try to sneak in with their nightpaint and their mini-nukes; taking drugs to suppress hunger, sex, fatigue, shock, pain, hysteria . . . sometimes drugs to suppress drugs.

No one cares to remember just when it happened. The Federal Expeditionary Forces ran into more Alliance ogres and mechs than anyone had seen in six years. Six commands were vaporized in ninety minutes; then we broke. Out of a reinforced brigade, four hovercraft made it to a valley on the French side of the Pyrenees - Mateland, Borslov, Timmen, and myself.

There was no more rear, no headquarters, no one to report to. I established laser contact with the orbitals, and almost wished I hadn't. The Alliance had hit the Western Hemisphere with a classic strike over the Arctic, and hit the orbitals with something more innovative reactor waste dumped in orbit. Men and electronics were dying. As they died, they were systematically blistering the Alliance homelands, firing by mapgrid. Here, in this little valley, I could see the north sky glow. I could hear the thunder rumble, and every rumble was a million human lives.

There was nowhere to appeal. L-5 was neutral. Asia was still glowing from the Alliance strike of Year Three. Africa was desert, savanna, and jungle, and blisterglass where orbitals had targeted the cities. There was no one left to see the show, no one who gave a damn about the death of the Federal army in Europe.

MI kept trickling into the laager, three men from a division, fourteen from a reserve company. The last group said they had seen Alliance mechs fighting an ogre. I shook my head. I didn't think the Federation had an ogre to its name anymore.

I wanted to leave the matter alone. But chance would not have it so.

First we heard the low-frequency thunder of an ogre, an unforgettable sound. I told Willovs to get the MI suited up. Soon, we could see the blue-white flare of hiveloc rounds, and hear the rain of glass pellets condensing from the contrails.

It was an Alliance MkV, chasing about

30 Alliance hovercraft. Helluva sight. It was battered, missiles gone or fused to the shell, sensors pocked with hits. It was methodically chopping up GEVs, like a bear fighting a pack of lapdogs.
"Christ!" said Borsiov.
I said, "I don't see the dish." I fumbled with the binocs. There was blackened metal behind the ogre's main battery, where the dish should have been.

Mateland raised his eyes from his zess-scope. "Most of the externals are gone, but it's destroying those hovers."
"Good!" said Borslov. "Their own demon should destroy them!" He laughed.

I said, "Mount the troop." And then, to explain, "It will be targeting us before long."

Mateland winced. "Right. MOUNT 'EM!' He kicked a pine bough off his turret.

I grabbed Willovs, pointed to a crest a hundred meters down the valley. "Get your apes..."

She nodded and they were gone, eating up meters with each bound. Impossible to tell the men from the women.

I ran to my hover and slammed the hatch behind me. Jan already had the turbines spinning.
"Seal her!" My ears popped with the sudden pressure.
"Let her go!" Again, the familiar, comforting vibration of a live hover. I looked at the screens. We were swinging in from behind, nine klicks from the ogre. At 200 KPH , we would be on top of it in one-sixty seconds. I wanted to fire at one-five seconds.
"Troop leader to all. Arm your hotshots. Set seekers for IR trace. I'll paint it with a laser. Fire on impulse. We'll all be dosed after the strike, so splash down in the river." I nudged the hover into the swamp the treads had created.

The secondaries started tracking us at five klicks. With a roar, the swamp ahead of us turned vertical. We drove into a cloud of water and muck. I glanced at the screens. Still four blips on our side. No hits, at that range.

Suddenly, I had visual again. The ogre was turning into us, bringing its primaries to bear.

Borslov broke channel, singing in his high tenor, "Dies irae, dies illa. . ."

Timmen kicked in his afterburner and dashed ahead. He started to jack and weave, laying down a roostertail of mud and debris to screen the rest of us. I could never have ordered anyone to do that.
"Unmask batteries." I heard the whine through my helm as our missiles rolled into the open. A glance assured me Borslov and Mateland were doing the same.

Timmen wasn't unmasking, for some reason.

## "Timmen?"

Sudden blinding flash. A shock felt, not heard. A hiveloc round had hit the lead hover, ripping away a turbine, spinning the 15 -ton craft like a tin can, venting the hydrogen tanks in a deadly white cloud.
"Timmen?"
Another hit left purple afterimages, and ignited the hydrogen. Flaming, the hover nosed in the muck, cartwheeled, flew to pieces.
"Quantus tremor est futurus," sang Borslov, firing his guns at extreme range, the shells bouncing off the armor of the ogre. Nameless fragments of Timmen's hover danced among us. "Quando iudex est venturus . . ."
"Ten seconds, acknowledge!"
"On pipe!" Mateland.
"Lacrimosa dies illa." Borslov.
"Yo!" Timmen, his voice in my head, not on the phones.

I painted the ogre, aiming for the blackened spot behind the primaries.
"Qua resurgent ex favilla iudicandus homo reus, huic ergo parce Deus."

I hit the impulse. The missiles kicked off. When they hit, there'd be the equivalent of three thousand tons of TNT, a fireball hotter than the sun pricking the skin of the ogre. The transitory bottle effect of the implosion would direct most of the force downwards, in theory. But the spillover could kill us.

Borslov and I broke right, almost rolling the hovers like fighters. My board turned red as the airducts hit bottom. A hiveloc exploded in the muck in front of my machine. My board went dead. We hit a six meter splash of mud, rock, and water. I heard the engine rip itself apart, trying to digest rocks at $90,000 \mathrm{rpm}$, spraying steel fragments even-handedly through hardware, crew, and armor.

The hover spun completely around. I glimpsed the ogre, its secondaries elevated, futilely trying to destroy the incoming missiles. By reflex, I hit the trigger, pumping a round into the treads.

Then the missiles hit. The blast scattered ogre treads like dry leaves. A wave
of rock and water rose fom the insulted earth, boiling, turning into superheated steam and white-hot fragments. Then the shock wave hit me.

I woke in the water, coughing. The blast had popped the crew compartment like a blister. Half-choking with water in my lungs, I scrambled through waistdeep mud, mixed with pieces of bulkhead, instrument boards, seat cushions. I almost brushed Jan aside. She was unconscious, lying half out of the muck, her helm black and shot with bubbles where a lick of fire had touched it. I dragged us both away from the burning hover.

A little, mindless eternity later, I came to realize that I was walking on dry land. Or dry enough. We were on a sand spit a few hundred meters from the hover. I sat us down and tried to estimate what was left of myself and the people who followed me.

My body felt reasonably intact. A few new burns, a few abrasions. Before the war, I would have been rushed to a hospital. Now, still fully equipped with limbs and organs, I rated myself active.

Willovs and her MI were still moving down the valley.

Borslov's hover had hit a clump of fir trees. It was burning like magnesium dropped into a wood stove. Pie Iesu domine, dona eis requiem. Mateland had splashed down too late. A little spot of bubbling water marked his hover.

A few kilometers downstream, at the base of a tower of steam and smoke, the ogre burned. Cracked open like a monstrous egg, it spewed its guts into the sky. I couldn't look at the fire within that cloud. My eyes ran. I brushed my face, and my hand came back bloody.

Gunfire. Someone was shooting. There was a hand sticking out of the water by Mateland's hover, clutching a sidearm. It emptied the clip into the air before I understood.

I hit the water. Getting a hold of him was hard. He struggled, and gasped horribly when I got his head out of the water.

It was Mateland. There was a bucket seat wrapped around his legs, folded as neatly as paper around a package. He

smelled of oil and river bottom and burnt flesh.

I hauled him out and unpeeled the bucket seat. He lay there and grinned at me. The pistol was still in his hand.
"Colonel, I went and pranged my hover." He pulled a steel fragment from the toe of his boot. "You think they'll accept this as evidence?"
"Most irregular. Charges will be drawn, Major. Consider yourself under arrest."

Somehow we were laughing. It was good to be alive.

Then, two things stopped at the same time - Jan's breathing and my laughter. Feeling a little guilty, I placed her body in a more comfortable position.

Then I looked around to see what was keeping Willovs.

About a kilometer upstream, the last five Alliance hovercraft were grounded. The crews were dismounted. Some had simply collapsed. Some were clustered around the command hover in the center.

Willovs was moving in on this pathetic scene. A by-the-book envelopment.

Mateland reloaded his pistol, as if it really mattered. "We going to hit them?"
"In a way. I'm going to ask for their surrender. Can you walk?"

He got up, cursing.
"Such language."
I managed to catch Willov's attention and waved her back. Together, with such dignity as we could present, Mateland and I limped into the Alliance camp.

The Alliance soldiers watched us come, most with blank indifference. They sat around their hovers, staring at the ogre burning downstream.

The command hover had been pranged. It looked like a tin can hit by a shotgun. Lying against the crumpled airskirts was a man in the uniform of a brigadier general. Kneeling beside him, a couple of medics were grimly trying to plug up a chest wound.

Around him were some people in black tunics; battlewebbing loaded with gear. Commandos. They held their weapons loosely, aiming at points between my navel and forehead. Last I heard of commandos, some two-star clerk had produced a liesheet saying they weren't on the Alliance TO, because in six years not one had been captured.

As I approached the general, one whirled and held a knife to my throat. Moving slowly, I glanced upslope, where Willovs and her apes had planted themselves, covering us with automatic weapons and missile packs. The commando followed my glance and almost nicked me in surprise. Probably the first time anyone had got the drop on him.

Gently, I brushed aside the knife and
knelt beside the general.
"Colonel Rein, 53rd Federal Recon. I respectfully request your surrender."

He opened his eyes. They were whitepupiled, sightless. His whole face was blistered, up to a neat line on his brows where the helm had been.

A medic started to stick a needle in his arm. He brushed it off like a mosquito.

I swallowed. A word and the commandos would butcher me.

He was trying to say something. From between those blistered lips came a whisper of passable English.
"Did you . . . did you kill it?"
"Yes, sir. Split it open with MSC warheads. It's burning now."
"Good." He coughed. A couple of drops of blood came to his lips. Then the words flowed furiously. "Good ... I wish . . . a mutiny, Colonel ... . damned mutiny . . . lost programmer . . . inhuman . ."
There were no more words. He was

coughing badly. A punctured lung, I thought. The medic tried to needle him again, and this time succeeded.

I said, "Rest, General. We can talk later."

He lay back and looked at me. His complete calmness scared me. I had seen it before.
"There is no later . . . I surrender . . . forces . . . kill me another . . . Colonel . . . kill . . ." He coughed and the coughing became a spasm. One medic reached for an oxygen mask. The other prepared a needle. But it soon became apparent they were treating a corpse.

I stood up. "Who is senior here?"
The commando who had grabbed me earlier stood forward. "I am. Major Vogt. Special commando, assigned to the General Staff,"
"You are my prisoner." I held out my hand for his weapon. Hesitantly, he gave it to me. Good.
"Muster your troops. Report numbers and condition."
"Yes, sir."

I waited for the salute. It came. And he didn't knife me when I turned by back. Another good sign.

An Alliance tech was bandaging Mateland's foot. Another was holding his gun for him. Both of these techs were female. Plainly, Mateland was himself again.

I took the gun from the tech and threw it into Mateland's gut, hard. He oofed.
"How are you feeling?"
"Topline, until you targeted me."
"Don't frat with the prisoners, not until you're sure who is whose." I felt a little sorry about the gun. Only a little. "Get your boot back on. Go tell Willovs to bring in her apes. We're going to lift out of here."

Mateland saluted. "Damn, Colonel, I'm in the army again."

Vogt came to a brace in front of me.
"Reporting."
"Proceed."
" 35 effectives, 12 wounded. 20 of the effectives are tech or service. 15 are commando or liftpanzer."
"What's the passenger rating on the hovers?"
"Except for the command hover, what we have left are hover-trucks, which can hold 15 passengers each."
"Hmm, some of the MI are going to have to ride on top. Get ready to lift."

Vogt barked something in his own language. Suddenly, everyone was busy. Four liftpanzer ratings clambered into their seats, while their buddies did the outside check. The medics did some lastminute work on the wounded, before they were bundled for travel.

In the middle of this bustle, I stood there, examining the weapon Vogt had given me. A 10 mm machine pistol with nightscope and flash suppressor, and a clip full of explosive rounds. Nasty thing.
"Sir?" said Vogt.
"Mmmn?"
"May I inquire my status?"
Yes, it was time to settle that. I held the weapon to him, butt first.
"In contravention of the Geneva Accords, I am offering you a commission as captain in the Federal Armed Forces. Do you accept?"

He smiled. "What conditions?"
"None, but a commission will remove you from the protection of the POW accords. If I have to shoot you, it will be legal."

He lost his smile. I could see he was considering the possibilities. What resources did the Federation have left? Just how dead was the Alliance? Did it have a chance of regaining control of the ogres? Would it be safer to stay a POW?

In the end, he said, "Colonel, you are
absolutely insane."
But he took the weapon.

## We lifted.

Most of the Alliance people had been assigned to staff. The general had seen the ogres' electronic minds changing under the effects of radiation, and had gotten his people out. The Alliance General Staff was left without transportation when the mutiny broke.

I shook my head. What a story! And no one to tell it to. I made a mental note to keep our comm bands open. L-5 was sure to send someone to salvage the orbitals, sooner or later.

Among the things I inherited from the general was a box of maps, each stamped TOP SECRET. The terrain was shaded with bright colors - yellow, red and purple - to indicate areas of contamination by toxin, rad and virus. To my surprise, there were quite a few green areas. Blessed by chance, some places had not seen a war since the 17 th Century. There
was one in particular I wanted to look at, not too far away ..

As our little company cleared the lip of the valley, someone broke channel. "Ogre!"
"All units, halt!"
I went to the screen. There was an ogre about 25 klicks behind us. It was moving into the radiation zone. Probably didn't see us. I raised hatch and had a look at the thing with the scope.

A MkIV. It had stopped about half a kilometer from the dead ogre. Drones hovered above. There were also some kind of vehicles down there. I turned up the gain on the scope.

There were hover transport and some civvie trucks. Little figures were getting out and going to work on the dead ogre with torches, hack saws and bolt cutters. Under the bright orange POW jumpers were the uniforms of Alliance liftpanzer, Federal droptroops, reservists, naval ratings, and others. I felt sick.

Mateland lifted hatch nearby. "What's up?"
"See for yourself."
I got Vogt and let him have a look, too. Neither of them said anything.

Willovs came bounding back from the lead hover. "What's going on down there?"
"Slave labor. They're using prisoners for salvage work. In a rad zone."

Willovs half raised her weapon. "What are we going to do?"
"Nothing."
"WHAT?"
Everyone was looking at me.
"We're going to sit here and watch while they kill those people. Watch and learn.
"When we're stronger, we'll pick the time and the place and we'll kill one. Then another. And another, until we slag the last of those demons or they fry us.
"Get under cover. Shut down all sys. tems. We're going to wait for a while."

I whispered to myself, "But only for a while."

## A 3-Player GEV Scenario

## Setup

The GEV map is used. The area is assumed to have seen a lot of combat. There are no roads, bridges, or railroads. The river bridge is down; all town hexes are rubble. There will be three players: Alliance, Federal, and Ogre.

## Beginning the Game

The Alliance player enters the map anywhere on the north side. All his units enter together (ignore stacking limits in the first turn) and move together (three hexes maximum) the first turn. The Alliance forces are composed of 10 regular GEVs; 8 GEV-PCs; 12 "hovertrucks"; and 6 points of infantry, distributed among the GEV-PCs in any fashion. See New Units, below for explanations of the GEV-PC and hovertruck.

The Ogre player moves second, entering the map after the Alliance player. The Ogre may enter anywhere on the north side. It moves only two hexes its first turn. It is assumed that the Ogre was lying doggo in a forest or lake, waiting for stragglers. Spotting the Alliance force, it came up behind them - but (possibly hoping to capture some prisoners) did not
fire to wipe out the group while it is bunched. Therefore, the Ogre cannot fire its first turn.

The Ogre is a Mark V, heavily damaged. It has no missiles or AP left. It has also lost 6 tread units and two secondary batteries. It therefore retains two main batteries, four secondaries, and 54 tread units.

Starting on his second turn, the Alliance player must observe stacking limits normally. He'd better scatter! Starting on the Ogre's second turn, it may move and fire freely, up to the limits of its remaining abilities.

## Federal Player Entry

The third player in the game represents the Federal force. His units (4 ordinary GEVs and 12 points of infantry) begin the game together, in any hex within five hexes of 1516. However, they do not appear on the map at the beginning of the game. The Federal player writes down their location and reveals it when they enter the game.

The Federal player may enter the game on any turn; all his units must enter at once, and immediately begin to observe stacking limits. The Federal player
moves after the Ogre; he is the third player to move each turn.

The Federal player must immediately reveal the location of his units at any time that (a) an Alliance unit enters the hex, or (b) the Ogre comes within two hexes of their location. He will usually find it to his advantage to enter the game before circumstances force his hand.

## Human Cooperation

It is highly unlikely that either human player will be able to achieve victory without help (or at least non-interference) from the other. However, the two human players are supposed to be enemies. The fact that they face a common foe will not immediately erase this. Therefore:

At no time may any human players discuss specific tactics. They may speak to each other in brief and general fashion, i.e., "I'll hit him this turn if you will," or "If you don't attack him, I'll attack YOU." If the Ogre player feels that the humans are communicating too freely, he may jam their communications (so to speak) by limiting each player to ten words of battle-related talk each turn! To be fair, the Ogre should also be permitted ten words a turn of threats, offers, et cetera. However, it will rarely benefit a human to cooperate with a renegade Ogre.

If one human's units enter a hex occupied by units of another human player, they are considered to be attempting an overrun attack. Combat must take place. In a battlefield situation, trigger fingers
get very itchy.

## Leaving the Map and Ending the Game

Any unit which leaves the map is out of the game and may not return. The game is over when only one side has units on the map. If you want to end the game, run for the edge of the map; units which leave are not considered destroyed.

## New Units

Two new kinds of units are introduced in this scenario:

## GEV-PCs

The GEV-PC, or personnel carrier, is similar to a standard military GEV, but it has been modified to carry troops. A single GEV-PC can carry up to 3 units of infantry ( 12 men ). Its hovercraft body has been stripped of everything except a small pilot's cupola with a token gun. The body of the craft is flat except for metal "trees" to which the infantry attach themselves.

The GEV-PC has a small gun; strength 1, range 1. It has two movement impulses, like a regular GEV, but it is slightly slower. It can move 3 hexes each phase. Its defensive strength is 1 .

In order to ride on a GEV-PC, an in-
fantry unit must start in the same hex with it. Infantry may leave the GEV-PC at any time during the GEV-PC's movement, but may not move on its own that turn.

If a GEV-PC carrying infantry is fired on, treat that whole stack as a single unit with a defensive strength of only 1 . If the hover is Xed, the troops are also destroyed. If the hover gets a D result, one unit of infantry is lost. Terrain affects GEV-PCs just as though they were regular GEVs, but a $D$ result from terrain does not affect passengers.

## Hovertrucks

The "hovertruck" is a transport hovercraft. There are many kinds; for the purposes of this game, all hovertrucks have a movement of 3 (no second phase). They have no attack strength. They are thinskinned; any attack destroys one. They are affected by terrain just as though they were regular GEVs. A hovertruck may carry up to 3 units of infantry, but the infantry has no defense strength while riding a hovertruck.

## Victory Conditions

Each player has an entirely different set of objectives, and each player determines victory in a different fashion.



The Alliance player counts victory points as follows: 6 points for each hovercraft (of any kind) that escapes off the south edge of the map. 2 points for each point of infantry that escapes off the south edge. No points for units leaving other edges. The Alliance player also gets points for damage he does to the Ogre, as per the GEV rules. His main objective is simply escape and safety - but messing up the Ogre benefits him in that!

The Alliance player scores a marginal victory if he gets 100 victory points. 125 VP gets a substantial victory; 160 or more is a decisive victory.

The Federal player wins a marginal victory if the Ogre is destroyed. (No, this isn't rational; the Federals were fairly berserk at that point.) They win a decisive victory if they can destroy the Ogre while retaining at least one functional GEV. If they can keep more GEVs intact, so much the better! The Ogre is considered "destroyed" if all its guns and treads are shot out.

The Federal player gets no points for destroying Alliance units (or vice versa).

The Ogre's objective is to frustrate or kill the human forces. The Ogre wins a decisive victory if and only if neither human player wins any kind of victory. It wins a marginal victory if it prevents any Alliance victory. (That was its original mission, and it's only a machine.)

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Game design by Steve Jackson.

# Warp War The Campaign Game 



## by Joseph R. Power and Steve Jackson

After playing several games of WarpWar, many people hate to give up their favorite ships. Now they don't have to. The following rules allow for a multi-player "campaign" version of the game. They work best for three to six players, though more can be handled if the referee is patient.

Campaign WarpWar is a very slow game - natural, since it simulates exploration and conflict over light-years of space and decades of time. As a face-toface game, it is best suited for club play (doing two or three turns each meeting) or tournament play (where one heroic referee, or better yet, a team, accepts one move per hour every couple of hours for many hours of play). Campaign WarpWar also lends itself well to privately-run play-by-mail gaming.

The basic WarpWar rules will require the following additions:

## I. The Referee

A referee (and, possibly, assistants) will be required to create the galaxy, keep records on the ships and worlds, and give information to the players as they earn it. The best record-keeping system is simply to establish one 3 X 5 file card for each world or ship, keeping all relevant information on it and updating it turn by turn. For a world, the card should include name, hex number, owner, BP value, and accumulated BPs at that world. For a ship, the card should include ship name, configuration, missiles carried, tech level, and current location.

If the referee has access to a personal
computer, this record-keeping may be simplified enormously.

If the game is being played by mail, the referee will also have to handle combat; see PBM Combat, below.

## II. Creating the Galaxy

The WarpWar map is much too small for a campaign game. The referee will need to get a large sheet of hex paper (preferably numbered) with at least 400 hexes.

Stars: Each hex has a 1 in 12 chance of containing a star; roll 1 d 12 for each hex, or roll 2 d 6 and give it a star only on a roll of 11 or 12 . However, do not roll for a hex adjacent to an existing star; stars are never adjacent.

Warplines: Give each star a 1 in 4 chance of having a warpline to each of the 4 nearest stars. No star will ever have more than 4 warplines.

Home Worlds: Players' home worlds should be assigned in one of two ways. Either spread them more or less evenly throughout the map, or distribute them around the periphery of the map with none in the center. A purely random distribution of home worlds may lead to unfair disadvantages. All home worlds have 10 BP .

Other Worlds: Each star may be assumed to have one useful world. For each world, roll two 6 -sided dice and subtract 1 from the total to determine BPs. Thus, each world will have a BP value of from 1 to 11 , averaging $6 . \mathrm{BP}$ value of a world does not change during the game.

Home Defenses: There is a 1 in 6
chance that a world will have its own defenses when discovered. If a world has home defenses, multiply its BP value by 3 and give it one Systemship of that strength. Defenses will always be hostile. toward the players. It is suggested that damaged home defenses NOT repair themselves - but if the referee wants to keep track of neutral world ship repair, he can.

## III. Movement and Exploration

Each turn, each player writes down his moves and gives them to the GM. This is why the hexes should be numbered; if a ship has a movement value of 20 , its movement may be a string of 20 numbers.

Since a player does not know what is in any hex until he enters it, he is likely to encounter a star in the course of any long move. He should therefore specify what the ship is to do if it finds a new star: either continue moving or end its turn there.

If a ship enters a hex occupied by another player's ship, it must stop; the referee will end its turn there. However, a ship does not have to stop for a star, even if the star is owned by another player. If you pass through a star hex owned by another player, but do not stop, you will learn that there is a star there, and that the system is owned by another player. You will not know what its BP value is or who owns it.

Movement is sequential. The referee determines the movement sequence randomly each turn. He moves all the ships belonging to one player before he moves any ships belonging to the next player.

## IV. Star Possession

A player is said to own a star hex if he can keep a ship on that hex for one full turn without having any enemy ships present. If the star was previously owned by another player, he must destroy or drive off all defending ships and then keep a ship there for one full turn without combat.

When a player takes possession of a star, he controls its BPs. He is told what its BP value is, and how many BPs (if any) are accumulated there. (A star does not begin to accumulate BPs until it is first owned by a player.)

He is also told how many warplines that star has - but NOT necessarily where they go. Once a player has visited both ends of a warpline, he has charted the warpline itself and may use it in a normal fashion.

## V. Referees' Reports

Each turn, after all movement has been finished but before combat takes place, the referee gives a written report to each player. This report includes:

FOR EACH WORLD WHERE HE HAS SHIPS: ships present; their owners; number of warplines out.

FOR EACH WORLD HE OWNS: all the above, plus its BP value and stockpiled BPs.

FOR EACH SHIP HE HAS: its present position; any other ships in the hex; and who owns them.

HEX POSITIONS for any new stars his ships discovered that turn. If the ship stopped to explore, he gets information as per (1) above. If it just passed through, all he finds out is that there's a star there.

HEX POSITIONS for any allied ships whose hexes his ships passed through.

WARPLINES that he has now learned about by visiting both ends.

Anything else the referee feels he should know about - but treat all players equally.

After reading their reports, those players having combat to resolve may do so.

If the game is being played by mail, the referee's report will include an account of each combat the player's ships participated in that turn. The amount of information a referee allows a ship to report on the turn it is destroyed in combat is up to the referee. He may assume that it beamed all new data back to base before its destruction - or that NONE of the information it collected that turn, even to the combat, is relayed to the player . . . the ship simply vanishes if no allies survive to report. The latter option makes for a cloudy but interesting game.

## VI. Building Ships

A player may build ships at any star he owns, in normal WarpWar fashion. However, BPs may never be transferred from star to star. The BPs a given system produces must be used there or not at all. You may find it expedient to use smaller, less productive systems as "repair bases" and save the more productive systems to build new ships.

## VII. Tech Levels and Scrapping

New technological levels do not come automatically; they must be bought, traded for, or stolen. All players start at Level 0.

To buy a tech level, you must have the next lower tech level, and then spend 10

BPs times the desired tech level. To get from 0 to 1 costs 10 . To get from 1 to 2 costs 20 - and so on. The BPs spent to earn a higher tech level do NOT all have to be spent at the same time, or come from the same place.

To trade for a tech level, you simply have to convince another player to give it to you (see Alliances, below). Once you have a given tech level, you can give it (or any lower level) to any player you like.

To steal a tech level, you must capture a world owned by a player who has a higher tech level. The greater the difference between your tech level and his, the less you will learn from the devices you find. If the difference between your levels is only 1 , you get 5 BP free toward your next tech level. If the difference is 2 , you get only 4 BP , and so on. If you capture more than one high-tech world, you get an extra BP toward your level each time.

A player may never advance more than one tech level per turn.

## VIII. The Diplomacy Option; Alliances

This is an added option which may be chosen on any round of combat. If, on any round, all ships in a combat choose "diplomacy," then fighting is ended there for that turn and the two players may form an alliance. As allies, they may give each other worlds and/or ships as they see fit, share technology, etc. As long as two players remain allies, their ships may travel together. A ship passing through a hex with an allied ship does not automatically stop unless its owner has given contingency orders "stop for allied ships," or unless the allied ship's owner has commanded that it stop any ship passing through its hex.

Alliances may only be formed by players when they have ships in a hex together. Alliances may be broken at any time.

If not all ships in a combat choose the diplomacy option on a given round, the
ships that did choose diplomacy are considered to have chosen the "attack" option with a speed of zero. They may not fire weapons, but may have screens up.

## IX. Scrapping Ships

A ship may be "scrapped" at any time it is at a friendly world. It turns into BPs equivalent to $1 / 4$ of its present BP total. The BPs enter the planet's stockpile and may be used on that or any later turn.

## X. PBM Combat

If the game is being conducted by mail, it is impractical to have players choose options each round of a long combat - it would require months to resolve each combat. Instead, the referee should recruit assistants - one for each player who know the game. The assistant referees represent the ship captains of their respective players. The players may write standing orders of as much complexity as they wish, to be followed by the captains when battle is joined. Captains are free to use their own judgment on any matters not covered by the standing orders. Thus, on a turn when players A and $B$ have a battle, the referee will meet with his assistants who captain for A and $B$, and work out the battle. (If the standing orders include provisions for attempting diplomacy, the battle may be unnecessary; the referee himself will be familiar with all standing orders and will know this.)

Of course, no captain is familiar with the standing orders the other players have given their own captains.

All in all, a complex and long-running game. The general system outlined above could be used with other games besides WarpWar. Any exploration-type space game - for instance, Stellar Conquest, Starfall, StarForce, et al - could be played by mail or in a tournament with similar rules.


## Fantagies <br> <br> $\mathfrak{B y}$ Mail <br> <br> $\mathfrak{B y}$ Mail <br> 

by Ronald Pelir

Fantasy Role-play Gaming (FRPG) is primarily a social endeavor, requiring constant interaction. Therefore, the idea of play-by-mail (PBM) strikes many people as dull, substituting penpals for personal friends. But if you know what to expect, PBM can be very satisfying.

## I. Why?

A. It often happens that someone who commenced FRPG with a group of friends moves away. PBM lets them continue to play.
B. There may not be anybody available who plays the same way as you. Not everyone plays the same way. PBM allows you to interact with those who have the same orientation as yourself.
C. Set-up and actual play of FRPGs is time-consuming, with sessions of 12 or more hours common. PBM uses your available time. You can start a letter, put it aside, finish it hours later.
D. PBM allows maximum creativity. The referee can create at his own pace, need not develop a huge world at one time, and can lavish attention on what he does.
E. It's fun! Gaming is gaming, and PBM allows you to do more of it with interesting people you wouldn't otherwise meet.

## II. Responsibilities of the Referee

A. The chief and only rule is -Be Interesting!

1. Using a scenario is probably the best way to get players involved. Give them a definite place in the fantasy, a definite idea what to expect next, a definite goal. Naturally, the "what to expect next" isn't always revealed at the outset and the goals may change as players discover more about their characters. There is nothing wrong with using the prepackaged, commercially available scenarios, character lists, or dungeon/wilderness maps. Good ideas can come from
anywhere; you can change things just enough so the player won't know exactly what will happen even if he owns that package.
2. Develop the scenario. Have the characters react to the players as you would in their situation. Don't just roll the dice and let each action flow from the last. For instance, if you knock off the local bully, then you might suddenly make new friends, one of whom might involve you in a new adventure. If you've raided a dungeon and killed some goblins, expect organized resistance next time you go back in. Have the non-player characters be as colorful and personable as the players. Describe them as the players would see/hear them.
3. Be descriptive! Don't just say what happened, or what somebody said. Write the conversation as it happened. You had to learn composition writing in school; use it! When writing about a fight, don't just roll the dice. Describe what happens. Use adjectives. Allies fight bravely, people call out during the scuffle, someone fights strenuously, or barely holds his own. Is someone wounded? Where? By what weapon? What are the after-effects?
B. Maintain continuity. Give the feel of a fantasy world rather than disjointed random escapades.
4. Characters should behave consistently. They should learn from experience. Introduce continuting motifs, for example, a symbol identifying a certain sect, to make the character feel as if he's experiencing a consistent world.
5. Keep track of time. A good way is to include the game date on each letter. This keeps the player aware of how much time has actually passed for the character, as opposed to time passing in the real world. Make actions of non-player characters consistent with game time.
C. Keep good records. You should keep carbons of letters to players, keep them in chronological order. Keep a separate sheet with the player character's vital statistics, magic powers, special advantages or disadvantages, experience
points, encumbrance, wounds, money, etc. Put this is front of you as you read the player's letter and as you write your reply, referring to it where necessary and making changes when the situation demands. Record things as they happen; you might forget later. You might also circle or underline important passages in the player's letter - such as marching order of his allies - so you can refer to it quickly as you plot the next encounter.

## III. Responsibilities of the Player

A. Keep good records. The game may take years of real time; you want to remember what the character thought, said, or did a short game-time ago. Keep copies of your letters as well as the referee's letters, just as he does, and keep your own character sheet.
B. Make your letter descriptive. You have the same obligation to be creative and interesting as the referee does. By all means employ dialogue. You know what your character would say in a given circumstance, and you can extrapolate what his companion might say, based on referee descriptions. This will help the referee develop the characters.
C. Present alternative courses of action. Think of contingencies which could occur in a given circumstance, and describe what you'd do in each case.
D. Develop your character. Describe his physical appearance, habits, details of background, desires. Let the referee know what tie character thinks as well as what he does.
E. Don't cheat! Sometimes an episode must be re-run due to a mistake. Don't use this as an excuse to have the character "take back" an action or choice which he truly intended. Remember, the wheel of fortune tums both ways. That's part of gaming, too.

## IV. Where to Find PBM Games

A. Professional magazines may publish names and addresses of those looking for a game. Usually these will be lists of referees. If you want to be a referee, send your name in.
B. Magazines may have advertisements for commercial games.
C. Smaller publications, fanzines, and amateur press associations have contributors who may be interested in playing your game and/or are already running a game you might be interested in joining. Write directly to the contributors if the address is given.
D. Become a contributor yourself. Announce your interest; people will write to you.

## TSG Surveys

# PLAY-BY-MAIL GAME COMPANIES 

This is our first annual survey of play-by-mail companies. This is not a complete survey; a complete survey is not really possible. Individual moderators are much too numerous to list. And PBM companies have been known to fold in the time it takes to get the survey forms out and back.

Rick Loomis of Flying Buffalo says, "Newcomers thinking of answering PBM ads should be aware that most people just beginning to moderate games will bite off more than they can chew and end up abandoning their games. Some will return the money sent in, some will not. Some may even do a good job of moderating. But it ain't easy!"

Considering the difficulties of running a PBM game, it is remarkable so many companies have made a go at it. The tried and true moderators, and a few of the untried ones, are listed below. If your favorite PBM company has been omitted, let us know so we can include it in our next survey.

FLYing buffalo, INC., POB 1467, Scottsdale, AZ 85252; 602/966-4727. Founded 1970. Owner: Rick Loomis. Programmer: Steve MacGregor. Buys outside designs. Catalog free.

These are the people who started it all. Before FBI, the PBM "industry" consisted mostly of individuals moderating Diplomacy, Loomis' StarWeb (reviewed TSG 29) is, without question, the most successful commercial PBM game to date.

StarWeb: $\$ 10.00$ set-up, $\$ 3.50 /$ turn. (Rules available separately, $\$ 1.00$.) Nuclear Destruction: $\$ 3.00$ set-up, $\$ 1.00 /$ turn. (Rules available separately, \$.25.) Battle Plan: $\$ 5.00$ set-up, $\$ 3.00 /$ turn. (Rules available separately, $\$ .50$.) Treacherous Trajan's Trap (T\&T adventure): $\$ 5.00$ set-up, $\$ 11.00$ for five turns. FBI prefers that players read the rules first, before entering a game.

FBI games are run on a Raytheon 704 computer. Turnaround varies.

SCHUBEL \& SON, POB 214848, Sacramento, CA 95821; 916/487-5722. Founded 1974. Owner and programmer: George V. Schubel. Designers: Schubel, Richard Lloyd. Buys outside designs. Catalog available.

The Tribes of Crane (reviewed TSG 29), was the first game to seriously challenge the popularity of StarWeb. Schubel's StarMaster was reviewed in TSG 28. A company report from Schubel \& Son is featured in this issue.

The Tribes of Crane: $\$ 10.00$ set-up (includ-
ing the first three turns), $\$ 2.50 /$ turn. (Rules available separately, $\$ 3.50$.) StarMaster: $\$ 10.00$ set-up (including the first three turns), $\$ 2.50 /$ turn. (Rules available separately, $\$ 3.50$.) Arena Combat: $\$ 10.00$ set-up (including the first five turns), $\$ 2.00 /$ turn. For all games, Schubel offers, "If dissatisfied after the first turn, you may return the materials for a full refund."

Schubel games are moderated by game master, with some record-keeping by a Phoenix computer, with Soroc terminals and a Texas Instruments printer. Turnaround: about two weeks.

CONFLICT INTERNATIONAL ASSOCIATES, LTD., POB 383, Skokie, IL 60077; 312/181-7572. Founded 1978. Owners: Thomas and Tatiana Carey. Programmer: Robert Pellicore. Does not buy outside designs "as of yet."

CIA moderates Pellic Quest, an authorized variant of StarWeb. "We are currently working on our second game and are hoping to have it completed by late summer of 1981."

Pellic Quest: $\$ 19.50$ set-up (including first six turns), $\$ 2.25 /$ turn. The game is run on an Apple computer. Turnaround: about two weeks.

SUPERIOR SIMULATIONS, 524 Franklin Park Circle, Boise, Idaho 83709; 208/377-4950. Founded 1978. Owner: Vern Holford. Buys outside designs.

Vern Holford was introduced to computer gaming in Brett Tondreau's Galaxy II (reviewed TSG 29). His own product, Empyrean Challenge, is reviewed in this issue.

Empyrean Challenge: $\$ 16.00$ set-up (including first four turns), $\$ 4.00 /$ turn, or $\$ .04 /$ order, whichever is greater. The game is run on an Alpha central processor, with a CDC rigid disk drive ( 10 mega-bytes on-line memory). Turnaround: about two months.

CLEMENS AND ASSOCIATES, INC, POB 18287, Irvine, CA 92713. Founded 1978. Owner: John Clemens. Does not buy outside designs.
"Clemens and Associates, Inc. is a marketing and consulting form located in Irvine, CA that specializes in the aerospace and electronics fields. Early in 1979 we conducted a brief investigation of PBM games available and found them lacking in one aspect or another. At that time we designed Universe $I I$ and started a trial marketing program. . . . We are presently assigning new players into Quadrant IV, which will probably be the last quadrant added. Our goal is to provide a high quality game and we feel this would be difficult if the number of players exceeded 600." Universe $I I$ is reviewed in this issue.

Universe II: $\$ 4.00$ set-up, $\$ 2.00 /$ turn. The game is run on an Apple II. Turnaround: about a week.

EMPRISE GAME SYSTEMS, POB 2225,

Houston, TX 77001. Founded 1979. Owners: Corbett Ray, Robert M. Secrest. Does not buy outside designs.

Emprise Game Systems moderates Warp Force One, reviewed in this issue. "Presently, we are developing two new games. The first is a swords and sorcery game. The setting is a fantastic island continent where magic actually works and a few strong men can conquer large tracts of land. Each player will choose to be a fighter, magician, or cleric."

Warp Force One: $\$ 3.00$ set-up, $\$ 2.00 /$ turn. The game is run on an Advance Systems 6 computer. Turnaround: two weeks.

DE JAGER \& CO, POB 2307, Downsview, Ontario, Canada M3N 2V8. Founded 1979. Owners: Peter and Antoinette De Jager. Does not buy outside designs, "but we will consider it in the future." Catalog available.

De Jager moderates The Assassin's Quest, reviewed in this issue. TAQ: $\$ 2.00 \mathrm{Set}$-up, $\$ 2.00 /$ turn. Turnaround: about a month.

THE GAMEMASTER, POB 2878, Anaheim, CA 92804. Founded 1980. Owner: Larry L. Hall. Does not buy outside designs.

The Gamemaster moderates Wofan, a game which is in many respects similar to The Tribes of Crane. It will be reviewed in an upcoming issue. "Other games are in the works or are being studied."

Wofan: $\$ 10.00$ set-up (including the first three turns), $\$ 2.00 /$ turn. The game is moderated by a game master, with some record-keeping on a TRS-80. Turnaround: about 10 days.

THE COLONIES, 4114 Maple St., Fairfax, VA 22030; 703/273-0476. Founded 1980. Owner: David Breeding, Designers: Breeding, Jonathon Phillips. Buys outside designs.

The Colonies offers a game of the same name, a game master-moderated simulation of the colonization of the New World. The company still seems rather disorganized.

The Colonies: $\$ 6.00$ set-up, $\$ 1.00 /$ turn.
GAMEMASTERS PUBLISHERS ASSOCIATION, 20 Almont St., Nashua, NH 03060. Founded 1976. Owners: W. Elmer Hinton, JI. and partners. Buys outside designs.

Gamemasters Publishers Association is the current owner of Lords of Valetia, a game which has not produced a turn in over two years. GPA has been advertising heavily, and promises to start producing turns for a revised and expanded version of LOV before too long. Lords of Valetia: $\$ 25.00 / 12$ turns.
The "old" LOV was reviewed in TSG 15. The "new" LOV will be reviewed in an upcoming issue.

C-T SIMULATIONS, POB 174, Friendswood, TX 77546. This company is so new, we know very little about it. See ad, this issue.

## Amateur Moderators

An amateur moderator is generally cheaper (and sometimes less reliable) than a professional. Amateur moderators are welcome to advertise in the "Reader Ads" section. Others may be found by consulting Flying Buffalo Quarterly. Persons wishing to play Diplomacy by mail should send $\$ 1.25$ to Jerry Jones ( 1854 Wagner St., Pasadena, CA 91107) for the latest issue of Diplomacy World.

# Featured Review: <br> <br> Four PBM <br> <br> Four PBM Space Space Games Games <br>  

Empyrean Challenge, Universe II, Warp Force One and The Assassin's Quest

by DAVID BOLDUC

Okay, Forrest, you win. I know I promised to do these reviews months ago, and again every month since then, and that you signed me up for all these play-by-mail games on the promise that I'd review them, but I've been having too much fun playing them to take the time to do the reviews. Things have slowed up some, though, so here they are. (The threats that you and Jackson would hack and mangle me if I didn't produce has nothing to do with this, of course.)

The games we're interested in here WARP FORCE ONE, UNIVERSE II, THE ASSASSIN'S QUEST, and EMPYREAN CHALLENGE - are computermoderated, multi-player, play-by-mail games. What this means is that the players write down their moves and mail them in to the computer, which calculates the results of the turn and sends them back. This process will allow literally hundreds of players to participate in a game and interact without having to gather in the same place.

WARP FORCE ONE is probably the simplest of the four and is similar in many respects to StarWeb. 16 players vie for control fo $50-60$ star systems, each containing from 2 to 4 planets. Each player begins on one planet in a system, with no knowledge of the rest of the universe, and attempts to explore other systems by moving through "warp windows," which connect each system to $2-6$ others. Combat ships, cargo ships, forts, and "warp engines" are constructed from raw materials gathered by the player. A "warp engine" must be placed at each "warp window" in order to use it.

There are four possible environment types for planets, which correspond to the four races in the game. Each player can also have one of four types of government, each of which has a different ob-
jective in the game, ranging from conquest to colonization to exploration. Since the players have different objectives, there is room for a great deal of cooperation between players, as well as fighting between players with the same objectives. Alliances tend to shift back and forth until one group of players gains control of the universe and begin to fight among themselves for supremacy.

WARP FORCE ONE is an enjoyable game, both for the first-time player, because of its straightforward rules and mechanics, and for the more sophisticated PBMer who wants a challenge. Emprise Game Systems is particularly good about sticking to its 2 -week turnaround on turns.

UNIVERSE II is a fascinating and unusual game. The player starts in an unknown universe, with one spaceship and a limited set of rules. It differs from games like Warp Force One in that it is primarily a discovery game. That is, as a player explores the universe, he not only discovers the location of star systems and planets, but also discovers new rules, new equipment for his ship, and new things to do from shipping goods for a profit to being a mercenary, colonizing new planets, charting ionic storms and black holes, or exploring long-dead stellar empires.

Movement in UNIVERSE II is not simultaneous as it is in most games. There are no turn deadlines. Instead, the computer programming allows each player's turn to be processed within two days after it arrives.

It is difficult to describe the game in much detail. First, although I have been in the game a couple of months, I don't pretend to know much of what there is to know about it. Second, the fun of the game is the discovery process - finding things out. It would be a shame to spoil it. One hint, though - don't forget to ask about things. Very little of what you need to know is volunteered.

UNIVERSE II is my favorite of the PBM games I've played to date. The beginning player is able to learn the game as he goes along, and the more experienced player will be intrigued by the complexity of play that is possible, as well as by the amount of room for cooperation and diplomacy between players. Best of all, UNIVERSE II doesn't grow old on you, as many games do. There's always a new singularity to be explored or a lost empire to be encountered.

THE ASSASSIN'S QUEST, on the other hand, is a truly nasty game. Unlike the first two games discussed here, it is strictly a combat game, played out between 30 players in a three-dimensional universe. Each player has 7 ships, with which he tries to destroy the ships of another player - his target. He in turn is hunted by the ships of another player his assassin. Several different types of weapons are used, and each player has two allies, who try to help him kill his target and assassin while staying alive themselves.

Points are awarded for hits on a player's target. Points are lost for hits on his own ships or those of his allies. The point system makes for constantly shifting alliances, as neutral players are persuaded to help in fights in exchange for help in their own. Things really turn nasty when a player's ally decides he is more of a liability than an asset, and puts out a contract on him.

Two interesting design aspects of THE ASSASSIN'S QUEST are limited intelligence on the location of ships and mines other than one's own (from 5\% to $80 \%$ effective), and a "rogue ship" rule, which goes into effect when a player misses a turn. "Rogue ships" will cruise about on their own, attacking anyone within range, which not only avoids the difficulties resulting from players who miss turn deadlines, but can create the spectre of a player's best friend going ber-
serk and turning on him. The only real drawbacks of the game are the constant need for computation of ranges and De Jager \& Co.'s Canada address, which can mean problems with the Canadian postal service.

THE ASSASSIN'S QUEST is both difficult and unusual, but well worth the money for the player who's looking for a thrill.

EMPYREAN CHALLENGE is by far the largest and most complicated of the four games reviewed here. 150 players vie for control of 100 star systems, containing as many as 10 planets apiece. Each player is the ruler of a society and begins on a planet with 24 others, with whom he must negotiate or fight. Along the way, he must cope with economic problems, rebellions, war, and starvation, and must develop new technology in order to explore the worlds in his home system, build orbiting colonies, and establish interstellar travel.

An enormous amount of detail work is required, as players must make production allocations between the numerous items they can build, design and resupply their spaceships and colonies, attempt to develop new technology, and ward off aggression. Any player who doesn't own
a pocket calculator is in real trouble in this game.

As complicated as it sounds (and it is complicated), EMPYREAN CHALLENGE is a mountain of fun to play. It is a world game - an economic game - and consumes a tremendous amount of time. Turn deadlines are generally at least a month apart, which seems like a long time initially, but a great help later on. Initial problems with the game, such as massive rule revisions (the first game was the playtest) and lagging processing (caused primarily by some serious health problems in the designer's family) have been solved, and the game is moving along nicely now. I recommend EMPYREAN CHALLENGE for the serious game freak - particularly the type who likes "monster" games.

All of these games are recommended, though in different ways. WARP FORCE ONE can be enjoyed by both beginning and advanced players and is entertaining without consuming inordinate amounts of time. UNIVERSE II is probably the most open-ended of the bunch, and will give you back as much as you put into it, without demanding rigid adherence to turn deadlines. THE ASSASSIN'S QUEST is for the player who likes a sharp,
vicious combat game with some elements of diplomacy. EMPYREAN CHALLENGE will keep the most detail-minded player busy for weeks on end. They are all well designed and rewarding to play.

WARP FORCE ONE
Emprise Game Systems
P.O. Box 2225

Houston, Texas 77001
(\$8 set-up, including three \$2 turns)

> UNIVERSE II Clemens and Associates, Inc. P.O. Box 18287
> Irvine, Califormia 92713
> (\$4 set-up, $\$ 2 /$ turn)

THE ASSASSIN'S QUEST De Jager \& Co. P.O. Box 2307

Downsview, Ontario Canada M3N2V8
(\$2 setup, \$2/turn)

## EMPYREAN CHALLENGE Superior Simulations 524 Franklin Park Circle Boise, Idaho 83709

 $1 \$ 16$ setup, includes three $\$ 4$ turns. Subsequent tums are billed at $\$ 4$ each, or $\$ .04$ per order, whichever is greater.)
## the <br> JOURNAL <br> Is your Traveller campaign going down the

 drain because of a lack of fresh ideas? Get the Journal, and stock up. The Journal of the Travellers' Aid Society is a 40 page ScienceFiction adventure gaming magazine. Each issue is stuffed full of play-related articles and features guaranteed to pull your campaign out of the black hole of boredom.In addition each issue inc/udes:
Amber Zone: Scenarios for Traveller. The Bestiary: Descriptions of alien animals. Ship's Locker: New items of equipment. PLUS-irregular features such as game variants, reviews, Traveller rules modules, Question and Answer sections and Ref's Notes on playing specific situations.

The Journal of the Traveller's Aid Society is available at fine hobby shops everywhere or by subscription, $\$ 7$ for four issues.

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## COMPANY REPORT:

## SCHUBEL \& SON

After several years in the science hobby supplies business, Schubel \& Son moved into the game business with the introduction of The Tribes of Crane, a game master-moderated (as opposed to computer-moderated) play-by-mail game. This game proved to be very well received by gamers and the enrollment grew rapidly. After six months of operation, a second game of The Tribes of Crane was started. Between the two games there is a total of just under 2,000 participants.

In January, 1980, Schubel \& Son introduced its second play-by-mail game, StarMaster. StarMaster is also game mas-ter-moderated. Like The Tribes of Crane, it has proved very popular. The current enrollment is approximately 1000 and growing rapidly.

Schubel \& Son also introduced a smaller scale computer-moderated game as an addition to The Tribes of Crane, called Arena Combat. Arena Combat may be played as a stand-alone game, but most players find it most interesting when incorporated into the much larger world of Crane.

As The Tribes of Crane grew in size and complexity, it became obvious that a better job could be done if recordkeeping (not decision-making) was handled by a computer. To this end a Phoenix Main Frame was purchased with 150 K of RAM and $2,000 \mathrm{~K}$ of on-line disk storage. The system supports 4 Soroc terminals and a Texas Instruments dot matrix printer. The computerization has improved the accuracy and speed of the record-keeping and allowed greater expansion and an increased realism.

Our approach to PBM gaming has both advantages and disadvantages:

## Advantages

1. One of the major advantages of play-by-mail gaming is the constant ready competiton. There is never any problem of finding others ready to play when you are. Just send in the turn. Your level of involvement is up to you. Some players do very little correspondence with other players; others correspond heavily in planning their moves.
2. A second advantage is the size and complexity of the game system pos-
sible in a play-by-mail game. Since many people participate and thus share the total operating and development costs of the game system, it is thus possible to have a truly huge game system. The world of Crane is $2,500,000$ square miles and the complexity allows actions in nearly all phases of an archaic fantasy world: politics, business, medicine; just about anything you can think of is possible.
3. Another advantage of game mastermoderated, no-time-limit (you may send in your turn anytime) play-bymail gaming is the constant interaction. Constant interaction means the game continues even between your turns . . . meaning you could have an encounter between the turns you send in, handled through standing orders.
4. Play-by-mail gaming allows you to spend all the time you need to ponder your next move.

## Disadvantages

1. There are, of course, the time delays while your turn moves through the mail and is processed by the game master. The average is about two weeks round trip for most turns.
2. The rules of game master-moderated games tend to be less specific and serve more as a guideline than the rigid rules of a boardgame. The game master's decisions are subjective, but
always final.
3. As in all human endeavor, error is possible and not at all uncommon. Clear instructions to the game master as to your intent can help a lot.
4. Play-by-mail gaming can be rather costly. Game masters are professionals at what they do, and must be compensated. Game moderation is how they make their living (though most game masters are not well paid; starting positions are generally at minimum wage). In addition, the computers common to this business are costly. The base turn fee cost to participate in The Tribes of Crane is $\$ 5.00$ per month, allowing for two turns.

## New Product Information

Schubel \& Son has plans to continue the expansion of both The Tribes of Crane and StarMaster to include new elements to keep the games exciting and dynamic. In addition, there are plans to make major changes in Arena Combat to improve turn result quality. As to new games, there are several ideas that have promise. The most attractive at this time is a plan for a spy-type game in a modern setting, but no release date is available.

Schubel \& Son is always looking for good play-by-mail designs. We generally pay a $3-4 \%$ royalty.

George V. Schubel
Schubel \& Son

# StapMaster 

Air screams around your ships as they enter the atmosphere. Missile-launchers fire deafeningly to port and starboard while atmosphere-fighters drop in shrieking dives from their hangers below. Warriors, tightly clenching their weapons, check their pressure suits one last time and climb in grim silence into their landing shuttles. In the distance five more heavy cruisers of your empire are firing and unloading their cargo, their hulls gleaming crimson in the light of the red'sun above.

This is not a drill. Already laser and missile fire from the mile-wide guardian fortresses below have turned the sky into an exploding nightmare of smoke, fire, and fragmented metal. Planes and shuttles twist and dodge down towards a landscape rapidly becoming an inferno of flame and radiation.

This is no mere raid. For years your people had explored nearby systems without violence, trading technology to the primitive civilizations there in exchange for raw materials. Some species had even thought you gods.

Then you met the Aeratang. Merciless, brutal, they destroyed your exploring ships and began to slaughter your colonies. But you found their home planet and launched the greatest fleet your kind ever built to carry the war to your enemy. To fight for your very survival.

Will it be enough?

Starmaster is a correspondence game of galactic exploration, diplomacy, and conquest allowing for interaction not only between each player and the worlds of the galaxy, but between the players themselves.

New players begin further out from the Galactic Center than established players allowing them to develop themselves among equals. You may lead a powerful reptilian race, carving out a vast empire of colony and subject worlds; or perhaps an insectoid species, engaged in a holy crusade to convert the galaxy to the worship of their many-legged god.

As chosen ruler of your people, you must decide what diplomatic and military policies will be followed in order to lead your kind to dominance among the sentient beings of the galaxy.

The galaxies of StarMaster are a complete fantasy environment of solar systems, with geographies ranging from worlds near absolute zero to worlds where rivers of molten tungsten bubble, with technologies spanning from rock-throwing cave-dwellers to advanced Elder Races with near-godlike abilities.

Nor is the StarMaster environment limited in terms of playing area. There are multiple galaxies allowing for extra-galactic invasions across the voids. There are both natural and constructed gateways to (and from!) other dimensions and parallel universes.

StarMaster is limitless in possibilites, bounded only by imagination! It is a game where, literally, anything is possible.

¿1979 Schubel \& Son


StarMaster offers these features:

- Design your species as if you could have directed evolution to this moment.
- Design your homeworld in terms of temperature, atmosphere, and mass.
- Choose your government and social order.
- You decide the production for all worlds of your empire, building colonizing ships, merchantmen. warships, warriors, and fortresses.
- Technology increases steadily, permitting faster, larger ships, deadlier weapons, and scientific breakthroughs.
The galaxies are dotted with the ruins of Elder civilizations lacking the strength to master the stars. Can you lead your world to greatness where so many others fell short?

StarMaster may be entered for $\$ 10.00$ which includes the first three turns, a rule booklet, and all necessary material (except return postage). Thereafter, turns are $\$ 2.50$ each.
sendto: Schubel \& Son
P.O. Box 214848.

Sacramento. CA 95821

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Enter me in StarMaster
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## Name

## Address



PBM Rules For:

## STARSHIP TROOPERS

by Chester E. Hendrix

A more elaborate version of this PBM system is being considered for publication by Avalon Hill sometime in the future, if enough interest is generated and all the bugs (no pun intended) get worked out. The system is designed to eliminate multiple mailings and provide for hidden movement to be recorded "above the board" as it were, by a simple coding system which you may find applicable to other games using similar game mechanics. These PBM rules include new units to appear in the GENERAL vol. 13, no. 6. These units can be included or used at your discretion. When you use this system, please take a few notes; if you find any glitches, inconsistencies, ambiguities or omission, please drop me a line so the finished product will require no adjustment. Of course, if you happen to find that the system works just fine, you could always drop a postcard to that effect! Send your comments to: Chester E. Hendrix, 1054 Lewis Oak Road, Gridley, CA 95948. All letters accompanied by an SASE will be answered. Please note that the following rules will be subject to copyright by Avalon Hill.

## Starship Troopers by Mail

Step 1: Both the Terran and Arachnid players fill out all necessary pre-game information (complex layouts, SW\&E distribution, hex and ordnance codes, Spaceship data, function codes, etc.) and place copies in stamped envelopes bearing the opponents' name and address. This envelope is then mailed to a neutral third party who will release the secret information upon notification of the end of the game.

Step 2: Terran drops all units and records their positions after drift, etc., or end of movement hexes, depending on how and where the Terran units arrive. (NOTE: Do not record the hex that Ter-
ran units stop in at the end of the normal movement phase unless that unit does not plan to use extended jump. Always record the hex each unit ends the TURN in.) The Terran then notes (on separate paper) any information regarding attacks, activation of SW\&E, the turn, date-ofturn, and any other information the Alien player would normally receive in a face-to-face game. The turn sheets are then sent to the Alien player.

Step 3: The Alien player will record any and all visible surface functions and movement (only what would normally be seen by the Terran during a face-to-face game). Attacks, demos, etc. are written on a separate piece of paper. (The Arachnid will keep a secret record of what every Engineer does every turn; activities, movement, special functions, etc.) The Alien player then sends the turn sheets to the Terran.

Alternate Steps 2 and 3 until the end of the game. (If the Alien player moves first, simply transpose 2 and 3 .)

Whe preparing data sheets (Step 1), the Alien will include a PBM sheet showing a 3 -character letter or number code next to every unit. Later in the game when the Arachnid wants to move a unit in an inverted mode, he simply substitutes the code for the unit's identification number. The inverted units would not be revealed to the Terran until they either attacked, were attacked, or Terran units ended their movement in the same hex.
(Also, in Step 1, players may wish to include an engineer sheet. Assign a code to each of the secret and hidden functions that both players may need to make during the game. As these codes will not be revealed unitl the end of the game, they can be included in each turn, showing what each side is doing during the game, and thus preventing any chance of falsifying hidden or secret movements.)
(It is also possible to list a code for every hex on the board. These codes would allow the Arachnid player to note

his Engineers' position every turn without the Terran knowing where he's at, and also provide the Terran with an assurance that the Arachnid will make legal moves, since the Terran will be able to check them out after the game. This also allows for the Arachnid to note hexes in which special functions took place.)

Arachnid demos may only be blown during the Arachnid's turn (after the Terran has finished movement). The only exception to this is when the Terran has made a Close Assault attack and was in position to be hit while stopped at that hex, or if a Terran unit made an ordnance drop in that hex. Any Terran units thus caught (regardless of the results of the demo attack) will be considered to have ended movement on the hex where the demo was detonated. Combat or ordnance drops within the hex will be allowed (that is, if a Marauder was Close Assaulting a Bug Worker unit, the attack against the Bug Worker unit would be resolved before the demo attack), but following the demo blast, that the Terran unit will
not be allowed to leave the hex (e.g., by extended jump) and all further attacks (e.g., ranged weapon attacks) would be cancelled. Note this might reduce odds on later attacks which that unit may have been scheduled to participate in. These attacks would continue, but at reduced odds due to the loss of the demo-attacked unit's firepower.

When Terran units need to enter tunnel systems, simply state which units will go down, how far, and which direction of travel they will go (most desirable direction first), for example -
"ASL2A, ASA, A1A, A2A go down
breach at W17. Will go as far as
possible in the following order: S ,
SE, SW, NE, N, NW."
This would mean that the units listed above would move South if the tunnel runs in a North-South direction, but if not, then Southeast if the tunnel runs Northwest-Southeast, and so on. Any junctions they would come to would cause the direction to be changed in favor of the direction listed in sequence above. They will also stop (and enter if possible) at P.O.W. cells. Of course, if the Terran player already knows the tunnel layout, he could simply note the hex he wishes to move to.

Combat is resolved as per normal

PBM rules - the attacker notes all attacking units, weaoons used, odds generated, units defending, and post dated stock listings for die rolls. For example -
"ASL1B, A7B, A6B attack BEAM
(1C) with HE Fire $+3: 1$, FORD on SEP 28."
This would mean that ASL1, A7, and A6 (all of B Platoon) are attacking the Arachnid Heavy Beam Weapon (from the 1st Complex, C Cell) and each unit is firing an HE launcher at it. $9 \times 3=27.27: 8$ rounds down to $3: 1$ for your odds. FORD will be the stock listing used to generate the die roll, as in regular PBM combat.

Occasionally, the Terran will want to attack during the Close Assault Phase and then drop SW\&E during extended jump. This would be noted as follows -
"C5A, C6A, C7A attack WR4 (2A)
by CA $=4: 1$, CHRYSLER on SEP
28. ALSO, C5A drops charge on AA12, C6A, C7A drop DAP on WR2, WR3 (2A) during EJ $=6: 1$,
GENERAL MOTORS (WR2) and
TEXACO (WR3) on SEP 28." This would mean the following: assuming there are no units in AA12; and WR2 and WR3 are in hex BB12, WR4 is in AA11, we would know that $\mathrm{C} 5, \mathrm{C} 6$, and C 7 (all of A Platoon) are attacking WR4 (War-
rior no. 4 of A Cell, 2nd Complex) during the Close Assault Phase (CA) with their basic combat strength. $3 \times 4=12.12: 3$ rounds down to $4: 1$, and Chrysler would be the stock used to generate the die roll. During the extended jump phase (EJ), C5 drops a bomb in hex AA12 while passing through. The Arachnid, of course, would know it was either a DAP, DAR, or HNG charge, but would not find out which until he moved a unit into or through he hex. C6 and C7 have both dropped DAP bombs on WR2 and on WR3 during their extended jump movement, $12 \times 2=24$. This rounds out to a 6:1 attack on each Warrior. General Motors would be the stock for WR2 and Texaco would be the stock to generate the die roll for WR3. Note that if the Arachnid had a demo in the hex WR4 was in and detonated it, that the following ordnance drops would all be cancelled.

For the complete Starship Troopers PBM rules (and five model turn sheets) send $\$ 1.00$ and a legal-sized SASE to Chester E. Hendrix (address above). For more information on the stock-market number generation system, send $\$ .50$ to Avalon Hill for their standard PBM instructions sheet. (Or, you can simply trust your opponent to roll the die honestly.)


Introduction

Three dimensional combat has long been a subject of interest in space gaming, and several attempts have been made to model it, with varying degrees of success. The subject is most interesting in tactical combat, and this is where it is most difficult: the need to keep track of positions, velocities, and accelerations add bookkeeping and decrease playability. There is a partial solution for those of you who have access to a computer: let it do the bookkeeping while you worry about your tactics. However, even this solution is not adequate unless you have a way of clearly displaying the relative positions of all the units involved.

In this article, I will present one solution to that problem: a technique for generating a $3-\mathrm{D}$ display on the video screen of your computer. By "3-D" I do not mean a display that will give the illusion of depth. This can and has been done, but requires sophisticated hardware or software or both. ("Sophisiticated" doesn't necessarily mean "expensive," as anyone who has seen Atari's Star Raiders game can tell you.) The display I'll describe is easy to implement and can be done on almost any computer with a video text display. It is not, admittedly, an original type of display and has been used in several board games. It is, never-
theless, effective, and can be used in a wide range of games.

## Basic Concepts

The fundamental problem in displaying objects with three-dimensional coordinates is that your display is only twodimensional. The answer is to use twodimensional displays - two of them, in fact. Each of the two displays shows the position of a given object in two of its three coordinates, with one coordinate (in this case, $x$ ) being used by both displays. If we assume that $x$ and $y$ are horizontal coordinates and that $z$ is a vertical coordinate (i.e., points "up" or "down"), then the $\mathrm{x}-\mathrm{z}$ display on top shows the relative heights of the objects involved (a "side" view) while the $x$-y display shows how the objects would look if you got "above" (or "below") then and looked down (or up). The entire display is based on some given reference point - a ship, a planet, a star, or just an arbitrary point is space - and will change as you change the reference point and/or the range of the display (i.e., the maximum distance you can see).

Perhaps the nicest feature about this type of display is the vast number of ways you can implement it. You can use text or graphics or (if your system per-. mits) mix the two. You can allow the
players to change the reference point and the range. You can set the displays side by side or one above the other depending upon which gives you the largest display and how you want to use the rest of the screen. You can show selected ships and project their next position based on current velocity. You can (if your system allows) continuously update the display. It is a tool which you can fit into your game as you wish, and which, with wise use, will add much to your enjoyment of the game.

## A Specific Example

This subject is best approached by giving a specific example of the technique, and then generalizing. Let's assume that we are writing a game where the player, plotting a single fighter, has to fight off a number ( $\max =10$ ) of enemy fighters. The display will always be centered about the player's ship. The range of the display can be changed by the player during the course of the game in order to allow him to "see" at different distances. The system we are using has a screen format of 24 lines with 40 characters per line. The text is upper case only, but can be displayed in inverse and flashing video if desired.

In order to maximize our display size, we choose to put one display above the other, with the top display representing the $x-z$ plane and the bottom, the $x-y$ plane. Each display will be 11 units wide by 11 units high, with one unit being two spaces wide by 1 line high. Display $1(\mathrm{x}-\mathrm{z})$

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will use columns $2-23$ of lines $1-11$ and display 2 ( $x-y$ ) will use columns 2.23 of lines $13-23$ (columns 1 and 24 can then be filled with inverse video blanks in order to form a border about the displays). The center of display 1 is (cols $12-13$, line 6), while display 2 is centered at (cols $12-13$, line 18). The horizontal axis of both displays represents the x -axis, while the vertical axis represents the z -axis for display 1 and the y -axis for display 2 .

To represent enemy fighters, we will

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use the letters A through J, writing them in the left-hand space of their particular unit. The player's ship - which is always in the center of both displays - will be indicated by filling the left-hand space of the central unit with an inverse video blank. Should an enemy fighter be occupying that unit as well, its ID letter will be shown in inverse video. To update the position of an enemy fighter, we will simply draw a blank over its old position and rewrite it at its new position. If two fighters occupy the same display space, only the last one written will appear.

Having defined all this, it is simple to set up a "draw fighter" routine. It assumes that the player has entered a range, which represents the distance (in game terms) from the center of the display to an edge unit along a given axis. Since that represents a display distance of 5 units, the resulting scale factor (the variable scale) is defined as

$$
\text { scale }:=5 / \text { range } .
$$

The procedure drawfighter accepts the fighter number (0 to 9) and a flag which indicates whether the ship is to be erased or drawn. It references a global array $\operatorname{ship}[0 \ldots 9,0 \ldots 2]$ which contains the current ( $x, y, z$ ) position of each ship and
generates an array display [0 . . 2] which has the coordinates of the fighter in display units. These values are then checked to see if the fighter is within range to be displayed (though this checking could have been done earlier by comparing the values in ship with the variable range). If the fighter is to be displayed, its screen coordinates are calculated by adding the range coordinates to the screen coordinates of the display centers ( $\mathrm{cx}=12, \mathrm{cy}=$ $18, \mathrm{cz}=6$ ). For the x -axis, the display coordinates are first multiplied by two, because each display unit is two spaces wide. The appropriate letter or blank is then drawn, and the routine exited. Here is an example of that routine is Pascal:

PROCEDURE drawship(snum: integer; erase: boolean); CONST
$\mathrm{cx}=12$;
$\mathrm{cy}=18$;
$c z=6$;
VAR
inrange: boolean dx, dy,dz,i: integer;
id: char;
BEGIN
inrange := true;
FOR i:= 0 TO 2 DO
BEGIN
display[i] := int(scale*ship
[snum,i] + 0.5); IF abs(display [i] $)>5$

THEN inrange := false END:

IF inrange THEN BEGIN
$\mathrm{dx}:=$ display $[\emptyset]$ * $2+\mathrm{cx}$;
dy := display[1] + cy;
dz := display[2] +cz ; IF (dx = cx) AND ( $\mathrm{dy}=\mathrm{cy}$ )

AND ( $\mathrm{dz}=\mathrm{cz}$ )
THEN inverse;
IF erase
THEN id := "
ELSE id := $\operatorname{chr}($ snum +65$)$;
gotoxy(cx,cy); write(id); gotoxy(cx,cz); write(id); normal

## END

END:
(This is not the nicest Pascal version that I could have written, since I tried to keep it as compatible with BASIC as possible. The build-in function gotoxy ( $\mathrm{x}, \mathrm{y}$ ) is equivalent to the BASIC statements VTAB(Y) : HTAB(X), i.e., move to column $x$ of line $y$.)

Next month we'll go into more detail on when to update the display, as well as converting this routine to use graphics instead of text.


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## C-T SIMULATIONS

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# GAME DESIGN: Theory and Practice 

## Part VII: Combat and Play Sequence

by Nick Schuessler and Steve Jackson

When we begin to talk about the combat phase of a game design, we make the transition from craft to art. Movement can be simulated, in the most precise meaning of the term, by using the concept of scale. In fact, the processes we use to determine movement are akin to those used to plan train schedules and bus routes.

In combat, the circumstances are much different. The fundamentals of combat are pain, suffering, and death nearly impossible to simulate accurately. Instead, we simulate the effects of combat; i.e., "defender eliminated," "attacker retreat," "disrupted."

To be sure, some levels of wargaming appear to simulate combat. For example, at the strategic level, a description of play may appear to be very close to the accounts in the history books. "The 38th division broke through and advanced 60 miles that week." Such a statement might be taken from an historical account . . . or it might come from a turn in War in Europe.

However, this appearance of simulation is due to aggregation. We lump thousands of troops together over a substantial period of time and then describe the results in a sort of shorthand.

At the other end, the combat of small units is often simplified and stylized to the point where it bears little relationship to actual bloodshed. Often not even the effects are faithful.
(In general, the smaller-scale the game becomes, the better the effects of combat are simulated. In the "ultimate" tactical games, where one unit represents one man, we see unpleasantly detailed combat effects. Computer Ambush, for instance, allows for "stunning" - and stunned soldiers can't "see" the enemy. And
many fantasy games (e.g., DragonQuest) allows use of a "critical hit" table to determine the precise type of injury a fighter has sustained, complete with lingering aftereffects.

One aspect of the problem is our format. In a game, we typically have simplified terrain, $100 \%$ intelligence, and alternating turns. But "real" combat is marked by confusion, ignorance, anxiety, and simultaneous action. And we really don't know very much about group or individual dynamics in life-and-death situations. The academe simply can't devise an ethical experiment that would answer our questions.

So, lacking format and data, we turn to the designer. In some ways, the combat portion must embrace the world of snake oil, crystal balls, and indigestion. At best, we can give it the right "feel" the illusion that this is how it "really" is.

## Play Sequence

Combat design begins with play sequence. The play sequence will tell us when we may fight and when not. Also, the play sequence will determine the "flayor" of our combat system.

The two essential parts of the play sequence are movement ( $M$ ) and fighting (F). (Here, we'll use "fighting" to represent both the "fire" of tactical games and the "combat resolution" of strategic games.) Most play sequences also have a fair amount of housekeeping at the be-
ginning and end: reinforcement appearance, production routines, rally of broken units, and even "move game turn marker." But it is the sequence of fighting and moving that will have the most effect on play.

To deal with this interaction, we'll use a simplified set of symbols, where:
$\mathrm{M}=$ movement
$\mathrm{M}_{\mathrm{C}}=$ conditional movement, where only certain units may move (normally only units which have not fired, or specialized units like armor)
$\mathrm{F}=$ fighting
$\mathrm{F}_{\mathrm{c}}=$ conditional fighting, where
only certain units may fight
$\mathrm{a}=$ one player
b = the other player
;= end of the phase
/ = end of the turn
Using this schema, we could plot the history of play sequence in wargaming. For example, the old Avalon Hill "standard" system used

$$
\mathrm{aM}, \mathrm{aF} ; \mathrm{bM}, \mathrm{bF} /
$$

One side moves, resolves combat, and then the other side does the same. The significance of PanzerBlitz was that it introduced a new play sequence to control tactical level play:

$$
\mathrm{aF}, \mathrm{aM}_{\mathrm{c}},(\mathrm{CC}) ; \mathrm{bF}, \mathrm{bM}_{\mathrm{c}},(\mathrm{CC}) /
$$

where (CC) is close combat or melee. Only those units which had not fired were permitted to move. Thus, manipulating the play sequence gave the impression of simultaneous action (you could not fire and move the same turn), even though the mechanical routines were
distinct.
About the same time as PanzerBlitz, SPI altered the old AH play sequence by introducing:

$$
\mathrm{aM}, \mathrm{aF}, \mathrm{aM}_{\mathrm{c}} ; \mathrm{bM}, \mathrm{bF}, \mathrm{bM}_{\mathrm{c}} /
$$

Here, the $M_{c}$ was reserved for "mechanized" units, who were allowed a second full movement after combat. Naturally, this made units more flexible and powerful; it also established a qualitative difference between units that transcended combat values. SPI also added an "overrun" capacity (a type of close combat) which was defined as a part of movement. Units, under certain conditions, could move and fight in the same impulse.

In these examples, the impulses of a single phase are reserved to a single player. That is, when "a" is fighting or moving, "b" may not react. In tactical play, this caused some awkward situations, and the concept of "opportunity fire" was developed. If the phasing player moved in a certain fashion, the non-phasing player would be allowed a fire. Thus

$$
\mathrm{aF}, \mathrm{aM}_{\mathrm{c}}\left(\mathrm{bF}_{\mathrm{c}}\right) ; \mathrm{bF}^{2}, \mathrm{bM}_{\mathrm{c}}\left(\mathrm{aF}_{\mathrm{c}}\right) /
$$

This interspersing of impulses for both phasing and non-phasing players tended to blur the distinction of whose "turn" it was at any given time. For example, take the play sequence of Highway to the Reich:

$$
\mathrm{aF}, \mathrm{aM}_{\mathrm{c}}(\mathrm{bF} \mathrm{c}), \mathrm{bF}, \mathrm{bM}_{\mathrm{c}}\left(\mathrm{aF}_{\mathrm{c}}\right), \mathrm{aF} ;
$$

$\mathrm{bF}, \mathrm{bM}_{\mathrm{c}}\left(\mathrm{aF}_{\mathrm{c}}\right), \mathrm{aF}, \mathrm{aM}_{\mathrm{c}}(\mathrm{bF} \mathrm{c}), \mathrm{bF} /$ Note here that both $a$ and $b$ fire and move in each phase; however, since the initiative is reversed, each player also gets two movement impulses back-to-back. Hence, the need for "free fire," i.e., the single $\mathrm{a} / \mathrm{bF}$ between the opposing player's moves.

## Effects on Combat

The question that faces the designer is what effect the play sequence will have on the combat system.

First, the emphasis of fighting or movement will approximate the number of impulses in the play sequence. For example, a $\mathrm{F}, \mathrm{M}, \mathrm{F}$ sequence usually highlights the fighting and subordinates the movement; M, F, M does the opposite.

I would appear that a F, M or M, F sequence would offer the most "balanced" approach to a design. Not necessarily. AH's D-Day used a M, F and SPI thought it necessary to go to a M, F, Mc because the counter density bogged down the play. Here an "unbalanced" play sequence was the right approach for a "balanced" game system.

Second, we can assume that a F, M sequence will create a much more fluid type of play than a M, F sequence. In $\mathrm{F}, \mathrm{M}$ the phasing player has the oppor-
tunity to first destroy the non-phasing player's units and then move - all before the other player has an opportunity to react. In M, F the combat comes at the end of the phase, and the opposing player gets to repair the damage. Suppose that the game theme calls for a high counter density - World War I, for example. F, M would (slightly) loosen up a static game.
(On the other hand, a M, F sequence extends the "reach" of a unit's attack (unless units which move are not allowed to fight that tum). Ogre, using a $M, F$ sequence can be very fluid - a unit moves to within range of the foe, attacks, and then (if it's a GEV) keeps moving. Robots! uses " $a M, b F, b M, a F$ " - which can discourage any movement at all. If your enemy can fire on your advancing units before they can return the fire, any forward movement becomes dangerous. The moral: phasing affects play, but by no means controls it!

Third, to the extent that you allow conditional fires, the movement will slow down. $\mathrm{F}_{\mathrm{C}}$ causes detours, shorter moves, and double fires. The unit gets hit once with conditional fire, and then again with regular fire. The conditions under which $\mathrm{F}_{\mathrm{C}}$ are allowed are limited only by the designer's imagination (e.g., two hexes moved in a line-of-sight, leaving a zone of control, etc.).

## Variable Initiative

Until quite recently, the play sequence also determined the initiative; one side was always the "first player" for each turn. Now we are seeing the "first player" being determined turn-by-turn. (this is no new idea for fantasy games - c.f. Melee.) That is, depending on a die roll or some other means, I might move first this turn and second next turn. If this variable initiative is used, and it is an altogether welcome development, some attention must be paid to its effect on the play sequence.

Variable initiative usually comes in two forms: rigid and flexible. In the rigid form, the die roll determines who is the first phasing player. In the flexible form, the die roll allows one player to choose whether he will be first or second. Often there is a weighted die roll, reflecting the tactical prowess of one side and making it easier for that side to control the initiative.

The effect of initiative on play can be substantial. Consider the player who controls the initiative for two turns, electing to be the second player in the first turn, and the first. player in the second turn. Given a simple F, M sequence, the result
would read:
$\mathrm{bF}, \mathrm{bM} ; \mathrm{aF}, \mathrm{aM} / \mathrm{aF}, \mathrm{aM} ; \mathrm{bF}, \mathrm{bM} /$
The number of impulses for each side are the same, but " $a$ " has two fires and two moves back-to-back. A string of lucky die rolls might imbalance the game, especially if the rolls come at critical moments.

However, the effect nets out somewhat. For instance, in our example above, if "a" wins the initiative for the third turn, he really has no clever options. If he elects to be the second player, he gives "b" double impulses. If he elects to be the first player, the phasing reverts to a more traditional mode.

## The State of the Art

Today, we normally see a M, F sequence used in operational and strategic level play, while the F, M is more common in tactical and sub-tactical levels. While this basic pattern persists, there are endless variations as designers tinker with the play sequence to achieve a desired effect.

The common patterns have an inherent appeal. As we said earlier, M, F at the strategic level tends to parallel the historic accounts. F, M at the tactical level gives the appearance of simultaneous action.

The variations on these patterns mostly run to "loopings" - repetitions of the patterns in a single phase. The impulses represent smaller and smaller increments. Campaign in North Africa, for example, has three repetitions of a $\mathrm{M}, \mathrm{F}$ sequence for each player each turn. In effect, the designer has used the play sequence to compensate for disproportionate scales. Hexes are 8 km , but turns are one week. By looping the impulses, each M, F actually represents two or three days.

Obviously, the next big step in game design is to reverse the patterns. Looping is simply calling turns by another name. A strategic game with a $F, M$ sequence would challenge the assumptions, much as SPI did in the early 70 s . In tactical play, the impulses are getting so fine (e.g., Squad Leader) that the concept of alternating turns is fading. We seem to be moving toward alternating counter moves and away from "you may move all, none, or some of your counters."

Play sequence has only recently come into its own as a serious design factor. For years, the main concern was with movement and fighting. Now we're beginning to realize that the sequence is nearly as important as the routines themselves.

## Next: Combat Strengths and Combat Resolution

## Trap Contest Яieร̉ults

The Trap Contest in issue 30 drew more responses than any other to date. Entries ranged from the basic to the fiendish; choosing just one winner wasn't easy! We finally narrowed it down to five, all of which are published here. The winner beat out the second-place entry only because it required no magic.

In editing these traps we have tried to make the physical descriptions as complete as possible. However, details such as damage and saving rolls have been left to the referee. These factors vary with each system - and the deadliness of the trap ought to be tailored to its location, to the treasure it may protect, and to the strength of the adventurers. We've tried to present enough to let a referee translate easily to his own system - whether it's D\&D, C\&S, T\&T, TFT, RuneQuest, or even (Cthulu help the poor spacemen) Traveller.

## First Prize: Orcs and Doors

The victims enter a room from the west. It is $15^{\prime} \mathrm{N}-\mathrm{S}$ by $10^{\prime} \mathrm{E}-\mathrm{W}$; the entry is in the middle of the wall. The room appears to be featureless; very observant characters might see a crack all the way around the north wall, a trap door in the floor to the south, and/or a small slit in the east wall. All these things are hidden, though.

When the entry door is closed, it locks from the outside. The north wall then begins to move toward the party at about 6 " per second. At the same time, the trap door to the south slides open a trifle.

If the characters attempt to open the trap door, they can (but with difficulty). About an 8 -foot drop will get them into another room; a door is visible at the far wall. However, if they drop into the room, they will find that the door leads nowhere. The only entry into the pit is through the trap door; they are now at the mercy of the orcs above.

If the characters ignore the trap door, they will eventually be hit by the sliding wall (unless they try to stop it first). It will prove to be thin, painted wood. When it splits and falls, it will reveal the three orcs that were pushing it (plus one more who just entered the room). It will now be seen that the room is really $20^{\prime}$ long N-S; the extra five feet were where
the orcs were standing. An open door is now visible at the previously-hidden north end of the east wall. The party will have to fight the ores in order to reach it.

If the party is a large one, the GM may have a few more orcs watching through the slit in the east wall. They will be enjoying the party's dicomfiture; they will run to join the fight if it seems they are needed, but it will take 3-4 turns for them to get there.

The whole point of this trap, of course, is that it gets prisoners for the orcs. They're not nearly as interested in fighting as they are in catching people.
-Submitted by Phillip Lam


Runner-up: The Six Pits of Hieronymous the Peculiar

A character triggers a hidden pit in the floor. He falls in - but when his friends look down to find him, he is nowhere to be seen. Later, they may find a second pit. If they look into it, they will see him in that pit - but anyone who climbs down after him will vanish. A character lowered down will also vanish - but will reappear if the rope is pulled back!

These two pits are part of a series of six. Each pit teleports, halfway down, to the next: 1 to 2,2 to 3,3 to 4,4 to 5 , 5 to 6 , and 6 to 1 . The only way to get to the bottom of a pit is to jump/climb/ crawl into the previous pit. If you try to come out of a pit, you can - but you'll come in the same way you left. To rescue someone from 4 , you must go into

3 , and so on.
-Submitted by Chris Barnhart
(You could make this even worse. Suppose that when you fall into Number 1, you can then be seen in Number 2 but when you try to climb out of Number 2, you come out of Number THREE . . . and so on! When you go down, you teleport ahead one - and when you come up, you teleport ahead AGAIN! That one could drive a party absolutely nuts.)


Honorable Mention: The Swordfighters
This is a rack of six enchanted broadswords. When a character picks one up, he will feel an electrical shock; there is a strong chance (at least $50 \%$ ) that he will drop the sword. Modify for DX, if you like. If the sword is dropped, it turns into a fighter when it hits the floor. Prowess of the fighter will have to be left to the GM's judgment - it depends on the location of the trap and the strength of the party. At any rate, the fighter immediately snatches another of the swords from the rack and attacks the party.

If he is killed, he drops his sword and the whole process repeats. However, if an enchanted sword is broken - or if a newly-generated fighter can be prevented from reaching the rack - the chain can be broken. The enchanted fighter will then vanish. The remaining swords might then be safe ... or they might not!

If all the swords turned into fighters, the rack will be empty, and the last fighter will come armed with a sword of his own. If he can be slain, his sword will definitely prove to be valuable.
-Submitted by Michael Cook

## Honorable Mention: Please Don't Slam the Door

An ordinary-appearing door is seen. Well, almost ordinary. There are no traps to be found, and no visible hinges. The handle is of ceramic - possibly rather ornate - and seems new. If the floor is carefully examined, the party may see splinters of ceramic (though the knob is
totally undamaged) or brown stains.
If the characters try to turn the knob, it turns freely - it's unlocked. If they push on the door, nothing happens. If they pull on the door, it falls down; it is VERY heavy, and hinged at the bottom. It should be difficult (but not impossible) to avoid, and do at least 3 dice of damage. There may or may not be a room on the other side. The falling door will make a LOT of noise.
-Submitted by Joe Vail, Jr.

## Honorable Mention: The Magic Magnet

This is a large room, with four doors. The walls are of dark stone; anyone looking in with a lantern will be unable to see the far walls. The floor is highly polished stone, very slick, sloping at about a 13 -degree angle. Anyone who enters the room risks being pulled to the center of the "bowl." (The room is actually about 60 feet in diameter; the center 20 ' area levels off.)

Underneath that central area is a magically enhanced lodestone, which will attract all iron, steel, cobalt, or nickel worn by anyone entering the door. Anyone who is pulled by the lodestone will simply appear to have lost their balance on the slick, slanted floor. However, once they are in the middle, they will be held fast by whatever metal they possess. They can leave - but only if they remove all ferrous metal from their bodies. And while it is no big trick to unbuckle a sword belt, a character in full plate will be anchored helplessly, pinned to the floor - unless someone else assists him.

Each character should get a saving roll upon his first step into the room. A character who makes the saving roll will feel vertigo, or a tugging sensation, but will step back into the hallway. Failing

the saving roll means you fall. The saving roll should be automatic for a character carrying no ferrous metal, fairly easy for someone with only a knife or sword, difficult for a character with a large weapon (or several weapons) . . . and practically impossible for a figure in full chainmail or plate.

The bottom of the room will likely be littered with metallic objects left by previous victims - perhaps even their bodies. Non-magnetic loot can be removed by anyone surviving the trap. Magnetic metals such as iron and steel will be very strongly held, and very hard to remove. The magnet cannot be turned off.

-Submitted by J. \& J. Chladek

## Special honorable mentions:

For subtlety - "An orc with a mace is hiding behind the door to hit you ..."

For originality - "This is a pit, with sharp spikes at the bottom ..."

For pecularity - Characters see, written on the wall, the number "IV" and the graffito "Watch your head." Those failing their saving roll will be hit by a golf club.

For Rube Goldberg-osity - The victim steps on a section of the floor, which tips and releases the Universal Solvent, which dissolves a steel cable, which releases a ock that falls and blocks your retreat, meanwhile activating. . .

For simple nastiness - a projectile spring-gun that fires a projectile containing brown mold.

## CONTEST: COMPUTER GRAPHICS

This month's contest is especially for the artists and/or computer jocks among you. It is: Submit the best "computer graphic" you can. All entries must be printed on paper and must be the original work of the person who submits them. Entries will be judged in attractiveness, complexity, and general eye-appeal.

NOTE: It is NOT necessary to have a computer to produce this sort of graphic. Typewritten entries will be perfectly acceptable. By using a W for heavy shading, $i$ for a slight one, and . for a very light one, you can achieve good effects. The more characters you use, the more subtlety of shading will be possible.

As to subjects: fantasy or s-f scenes are preferred, but not required.

All entries become the property of TSG. First-place winner will receive a 12-issue subscription; second place will receive 6 issues. Their entries, and any especially good runners-up will appear in TSG. We reserve the right to award no prizes of no entries of publishable quality are received. Entries must be postmarked no later than November 30, 1980.

## PELLIC QUIEST <br> Subjugation of a Gulaxy!

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The staff will make reasonable efforts

## CAPSULE REVIEWS

to check reviews for factual accuracy, but opinions expressed by reviewers are not necessarily those of the magazine. For information on writing reviews for TSG, see "Writing Reviews for THE SPACE GAMER" further on in this section.

Games for which reviews have been assigned or received include: The C\&S Sourcebook, City State of the World Emperor, Cosmic Encounter, Cosmic Patrol, D\&D Player Character Record Sheet, Death and Destruction, Deities and Demigods, DragonSlayers, Engage \& Destroy, The Evening Star, Land of the Rising Sun, The Legend of Robin Hood, Lost Dutchman's Gold, Magic Wood, Marine: 2002, Monsters! Monsters!, Nuclear War, Queen of the Demonweb Pits, Skull \& Crossbones, Slave Pits of the Under City, Spacefarer's Guide to Alien Monsters, Star Fleet Battles (boxed ed.), Swords \& Sorcerers, The War of the Worlds, Westward 1847.

Specific games for which we are seeking reviewers include: Darkover, The Emerald Tablet, It, Knights and Knaves, MAATAC, Nebula 19, Thieves' Guild, Treasure of the Silver Dragon.

ARMS LAW (Iron Crown Enterprises, Inc., POB 6910 , Charlottesville, VA 22906); $\$ 10.00$. Designed by Kurt H. Fischer, Peter C. Fenlon $\mathrm{Jr}_{\mathrm{r}}$, and S. Coleman Charlton. 32-page $81 / 2^{\prime \prime} \mathrm{x}$

## ABBREVIATIONS

$\mathrm{AC}=$ armor class
$\mathrm{AD} \mathrm{\& D}=$ Advanced Dungeons \& Dragons $\mathrm{AH}=$ The Avalon Hill Company
$\mathrm{APA}=$ amateur press association (sometimes action point allowance)
BEM = bug-eyed monster
CHA (or CHR) = charisma
$\mathrm{CON}=$ constitution
CPM = control process monitor
c.p. $=$ copper piece(s)
$\mathrm{CR}=$ credit(s)
C\&S = Chivalry \& Sorcery
CRT = combat results table (sometimes cathode ray tube, i.e., TV screen)
$\mathrm{d}=\mathrm{die}$ ( 3 d 6 means three 6 -sided dice)
D\&D = Dungeons \& Dragons
$\mathrm{DM}=$ dungeon master (sometimes die modifier)
DX (or DEX) = dexterity
EHP = evil high priest
e.p. = experience point(s) (sometimes electrum pieces)
FBI $=$ Flying Buffalo, Inc.
FGU = Fantasy Games Unlimited
FRP(G) = fantasy role-playing (game)
GAMA = Games Manufacturers Association
GDW = Game Designers' Workshop
$\mathrm{GM}=$ game master
g.p. $=$ gold piece(s)
h.p. $=$ hit points

HTK $=$ hits io kill

IQ (or INT) $=$ intelligence
$\mathrm{K}=$ killo-bytes of memory
LGM $=$ little green men
LK = luck
$\mathrm{MA}=$ movement allowance (sometimes magical/military/mechanical aptitude/ability)
$\mathrm{MR}=$ monster rating
$\mathrm{MU}=$ magic user
NPC = non-player character
OSG = Operational Studies Group
OSI = Ohio Scientific
PBM = play by mail
PET $=$ Personal Electronic Transactor (by Commodore)

## POW = power

RAM $=$ random-access memory
ROM $=$ read-only memory
S\&T $=$ Strategy \& Tactics
$\mathrm{SF} \& \mathrm{~F}=$ science fiction and fantasy

## SIZ $=$ size

s.p. $=$ silver piece(s)

SPI $=$ Simulations Publications, Inc.
$\mathrm{SR}=$ saving roll (sometimes strike rank)
ST (or STR $)=$ strength
$\mathrm{T} \& \mathrm{~T}=$ Tunnels \& Trolls
TFG = Task Force Games
TFT $=$ The Fantasy Trip
TRS $=$ Tandy - Radio Shack
TSR $=$ TSR Hobbies, Inc. (formerly Tactical Studies Rules)
WIS $=$ wisdom
ZOC = zone of control
$11^{\prime \prime}$ rulebook, 30 weapon statistic charts, 5 critical hit/reference charts, and packaged in a ziplock plastic bag. Published 1980.

ARMS LAW is a new combat system for resolving melee in most fantasy role-playing games, using only two percentile dice (a maximum of two rolls will be needed to resolve any one swing). It gives separate tables for each of thirty weapons.

ARMS LAW is packed with information and the method of combat resolution is fairly clean, though resolving combat on a map of some sort would have been an improvement. There are provisions made for incorporating magic, but no resolution for magic is covered.

Faults in ARMS LAW are minor, but I would not suggest anyone who plays strictly "by the book" to pick this system up; it is useless without a little work to alter other game functions. What do I mean? ARMS LAW delivers damage at the rate of $1-50$ concussion hits and generally adds about 20 to 30 more with a critical hit (take that, first level wizard . . . or fighter . . . or cletic!).

I recommend this book to anyone who likes to tinker with game systems.
-Jerry Epperson

CERBERUS (TFG); \$3.95. Designed by Stephen W. Cole, 108 die-cut counters, 24 -page rulebook, $17^{\prime \prime} \times 21^{\prime \prime}$ map; Two players; playing time $21 / 2-4$ hours. Published 1979.

CERBERUS is about the invasion of an alien world in 2094. One player commands the defending Cetian troops; the other, the invading humans. Both sides are highly mobile; "infantry" capable of covering 1000 km a day are the slowest units in the game. Battle-lines are nonexistent; combat centers around fixed installations and points of strategic value. As the game progresses, the initial human superiority is lost through combat and the arrival of Cetian reinforcements - it is not uncommon for the human player to find himself thinly spread and facing counter-attack during the last half of the game.

The novel ideas in CERBERUS make it more than just another game. The best is "space superiority," an abstract measure of the relative power of the players' fleets around the planet, largely beyond player control. Another is the ZOC rules, which force players to leave holding forces behind in order to pull out of battles. The variety of units, color-coded by type as well as ownership, adds to the game, as does the presence of one well-integrated optional rule, weather. The board deserves an honorable mention - along with a variety of holding boxes and two charts, there is a map of the planet resembling a flattened orange peel, which nevertheless does a better job of putting a round world onto flat paper than I've ever seen.

CERBERUS does have its problems. One is the impossibility, due to the partial-loss CRT and unit mobility, of forcing a decisive battle; whole turns can go by without anything major happening. Another is supply; while it is possible to win or lose the game because of it, keeping track of supply points is tedious. Also, the lack of a table of contents and the murkiness of ZOC and stacking rules are minor irritants.

All in all, CERBERUS is a solid game, playable and re-playable. While the occasionallyplodding pace makes it less than perfect for a blood-and-thunder player, I think it is well worth the money. Recommended.
-Greg Wilson

DARK NEBULA (GDW); \$5.98. Designed by Marc. W. Miller. One 6" x 9 " 24 -page booklet, eight $51 / 2^{\prime \prime} \times 8^{\prime \prime}$ mapsheets, 120 die-cut counters, 6 -sided die, boxed. Two players; playing time one hour; Published 1980.

This is a strategic space combat game based on the Imperium system. This time, the Solomani Confederation is fighting the Aslanic Hierate for control of the strategic Dark Nebula. The players alternate in laying down mapsheets at the beginning of the game. Movement is effectively unlimited, except on the Dark Nebula mapsheet.

GDW is clearly working with a successful system. In many places, the rules are taken word-for-word from Imperium. DARK NEBULA lacks such things as the glory index, enforced peace and appeals to the emperor. But it does' include some interesting rules for exploring and exploiting the Dark Nebula.

Unfortunately, the game balance is fragile. One player is likely to seize a dominant position early in the game: If that happens, the other player might as well give up.

If you have a copy of Imperium, there is no reason to invest in DARK NEBULA. If you don't own Imperium, buy it - and forget about DARK NEBULA.
-Forrest Johnson
HEXAGONY (AH); \$12.98. Designed by Ken Hodkinson. For 2-6 players; playing time one hour. Published 1980.

This game is very simple; you can learn the rules in 10 minutes. However, play is very subtle, and you'll probably never stop learning new strategies. Each player (there can be 2 to 6 players) has 12 units which are moved on a battle board divided into triangular areas instead of the usual hexes. The object of the game is to capture units belonging to your enemies. There are several ways to capture units. One way is to surround units in such a way that their movement is blocked; or a unit is captured when it is alone in a triangle and 2 units of a different color army move into this triangle. When a player's army is reduced to 3 units or less, he is defeated.

In order to make a move on the battle board, you must pay one supply piece and roll a pair of dice. The dice determine how many spaces you can move. However, if you roll doubles, you cannot move and your turn ends. Attacking an opponent can often leave you in a vulnerable position, especially if you roll doubles at an inopportune time.

To obtain supply pieces, you move on what is called the supply track. This surrounds the battle board. At the beginning of your turn you have the choice of moving on the supply track or the battle board. You can't move on both in one turn.

The rules have one or two problems. For example, what happens if you move one unit to a space containing two units of another color? (The rules state that a unit is captured when it is alone and two units of a different
color move onto its space.) Can an ally elect not to take a unit? These problems are minor. The rules are simple enough so that any interpretation will make for a good game. In fact, there is a long list of optional rules which add some variety and complexity.

I highly recommend this game. It is easy to learn but still challenging and enjoyable to play. It's a great game to have on hand if time is limited and you're not sure how many people are playing.

> -Stephen Taylor

JUNTA (Creative Wargames Workshop); $\$ 9.95$ bagged, $\$ 12.95$ boxed. Designed by Vincent Tsao. 8-page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ rulebook, $24^{\prime \prime} \times 18^{\prime \prime}$ map, 100 counters, two dice, 60 political cards, 85 money cards, one rules clarification sheet. For 4-7 players, with variants for 2 or 3 players; playing time 2 to 4 hours. Published 1979.

This tongue-in-cheek offering lets players take on roles as the civilian and military leaders of a banana republic, replete with riots, holidays, student unrest, backstabbing, doubledealing, assassinations, power plays, and the ever-present probability of a coup. Players attempt to form alliances, cut themselves well into the budget, transfer moneys to their secret Swiss bank accounts, assassinate competing players, and (if all is not to their liking - and it never is) seize power from the current administration.

JUNTA is a marvelous little game, likable from the first time you see the silhouetted, evileyed band of reprehensibles on the cover of the fules booklet. The rules are extremely easy to learn. Game balance is fine. The intricaries of back-and-forth power playing tend to fascinate and amuse.

This game has no major flaws. Some of the rules need clarification, but this is a minor difficulty, easily countered by agreements between players.

Overall, JUNTA is highly recommended to all gamers who enjoy backstabbing.
-Aaron Allston
O.K. CORRAL (Discovery Games, 936 W. Highway 36, St. Paul, MN 55113); \$6.00. 4-page $51 / 2^{\prime \prime} \times 81 / 2^{\prime \prime}$ rule sheet, 79 perforated cards, and a ziplock bag. Two or more players; playing time 10-30 minutes, Published 1980.
O.K. CORRAL is a simple card game where everyone gathers in the dusty streets for an oldfashioned gunfight. There is no game board; all tactics are controlled by the cards played. The last player alive is the winner.

The game is fantastically easy to play, and is rather fun. It is recommended that players use this as a "wind-down" or "warm-up" game, not the reason for bringing the gang together. A great little card game.
-Jerry Epperson

PROFESSIONAL WRESTLING (Off the Wall Games); $\$ 4.00$. Designed by Neal Spangler, Dave Buchbinder, and Bill Cohn. 35 -page $51 / 2^{\prime \prime} \times 81 / 2^{\prime \prime}$ booklet. Two or more players; playing time indefinite. Published 1979.

These rules, derived from the En Garde combat system, allows two (or more) players to select wresting maneuvers and gain "fan appeal points" for injuring your opponent. The game allows for lady wrestlers, promoters, midget wrestlers, and mud wrestling. The length of the game is determined by the number of rounds the players select.

This is a quite good parody of the wrestling "profession." The use of weapons (such as spurs, popsicle sticks, and whips) make many interesting games. Play is well-balanced and (usually) quick.

I would recommend this game to anyone who wants a change of pace. 1t provides real fun and is worth $\$ 4.00$.
-Tom Gordon
ROBOTS! (TFG); \$3.95. Designed by Mike Joslyn and William F. Ferguson III. Ziplock bag with 16 -page $51 / 2^{\prime \prime} \times 81 / 2^{\prime \prime \prime}$ fulebook, $17^{\prime \prime} \times 22^{\prime \prime}$ game map, and 108 die-cut counters. Two players; playing time $1-3$ hours. Published 1980.

Earth is radiation-blasted, fit for no living thing. When the surviving space colonists return to mine its resources they must use . . . robots. Each player lands three "factory ships" to build watrior robots. The number of robots built is determined by the number of resource hexes controlled. Therefore, players have two objectives: first control resource hexes; second, drive away or destroy the enemy ships.

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This is probably the best game that Task Force has produced yet. The robots are custombuilt by an elegantly simple method - lots of variety' with 'simple game mechanics. The combat is fairly fast and very bloody (oily?). The need to gather resource points turns this very tactical game into a miniature analog of the large strategic simulations. To do so, it seems to junk any "realistic" time scale - but who cares? This is fun.

Problems are basically unimportant. The turn sequencing (up to 13 phases per turn) is too complex for my taste, but it works well. The booklet and counters are very nicely produced, but the map is a quick-and-dirty job (how about fixing that for the second edition, TFG?). Rule 9.11, on "scrapping" modules, is ambiguous as written, but any one of several interpretations will work. Just make up your mind before you start the game. And the setup rules can lead to a game so unbalanced that it's over within a few turns. If you get an unfair setup, just start over!

On the whole, an excellent tactical game, given a slight strategic flavor by the resource rules. Highly recommended to any SF gamer except (possibly) the absolute beginner.
-Steve Jackson
SPACE OPERA (FGU); \$18.00. Designed by Ed Simbalist, Mark Ratner, Phil McGregor. Two $81 / 2$ " $\times 11^{\prime \prime} 90$-page booklets, 4 cardstock reference and record sheets, boxed. 2 or more players; playing time indefinite. Published 1980.

SPACE OPERA is a science fiction roleplaying game, with emphasis on the heroic and fantastic adventures suggested by the title. It is playable by itself, or with the Space Marines miniatures rules.

SPACE OPERA is, without a doubt, the most complete SF role-playing game to date. Everything from starship design to The Force is covered in these rules. World and character generation are detailed and have a very realistic "feel" to them. Player characters get their training in a Traveller-like military service, but with choice of what skills they want, and no chance of missing a "survival roll." An extensive "training" section allows characters to improve their skills during play. The weapon and equipment tables cover 38 pages - sure to please zap-gun and powered-armor fanatics. The combat system is rather complex - I suspect most GMs will simplify it for playability.

Unfortunately, the organization of the rules is horrid. Flipping through reminds one of browsing through a library with no shelves. There is a rushed feeling in some parts, as though they were tacked on at the last minute.

Despite its flaws, I highly recommend SPACE OPERA. This game has the best of the other major SFRPGs on the market and more. FGU plans to release supplements, but the game is playable as is.
-Stefan Jones
SPACE QUEST (not to be confused with Star Quest by the Operational Studies Group) - 2nd edition (Tyr Gamemasters Ltd.); $\$ 9.00$. Designed by Paul Hume and George Nyhen. $51 / 2^{\prime \prime} \times 81 / 2^{\prime \prime} 112$-page rule booklet. Two or more players; playing time indefinite. Published 1979.

SPACE QUEST is a science-fantasy roleplaying system with a grand space opera flavor. The emphasis is on re-exploring the galaxy after a great galactic empire was crushed by aliens. The rules cover all the usual things: character generation (including two non-human races), starship construction, combat, equipment, and planetary system and culture generation.

There is lots of ingenious work here. The personal combat system is excellent, with very imaginative and deadly weapons. Starship construction is somewhat restrictive but works well within the system. The authors have covered a mind-boggling array of sophisticated hardware and almost every situation which could be encountered in space. The best thing about SPACE QUEST is that it is a truly broad game.

Unfortunately, the character system is too much like $D \& D$ in space. There are five character classes, with corresponding "psionic powers" (read "spells"). Hyperspace is full of monsters which attack your ship. No details are given for on-planet adventuring. Aliens tend to be motile fungoids or bug-eyed monsters. The rules are disorganized and full of typographical errors. (In fact, the authors apologize repeatedly for the sloppy condition of the booklet.)

Still, this is a creative set of rules. There are innovations in SPACE QUEST which can be added to any system, and material that will enrich any campaign. Dropping the character classes and redesigning the class powers would make this a really good shoot-the-BEM-and-grab-the-girl space opera system. I would recommend it for any serious SF referee, if only for the hardware and incidentals.

- Steve Winter

SPELLBINDER (TFG); $\$ 3.95$. Designed by R. Vance Buck. $5^{1 / 2^{\prime \prime}} \times 8^{\prime \prime}$ booklet, $16^{\prime \prime} \times 18^{\prime \prime}$ map, 54 counters, four charts, ziplock bag. Two to four players; playing time two hours. Published 1980.

The chief wizard, Yamantsar, has left Silo-

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Order from:
mant to go conquering. Four wizards remain; each decides he should assume Yamantsar's position. In three separate scenarios, they work at doing so. The campaign game essentially involves playing all three scenarios in a row. Victory points are allotted solely for end-game control of certain strategic hexes.

The concept and rules have an appealing straightforwardness. You want to be there lastest with the mostest. There are only three types of playing pieces - wizards, armies, and ships. However, the game designer leaves gaps in the rules strewn throughout the text for the unsuspecting gamer. Example: armies may not move through the hex of an opposing wizard; there is no provision for an army to attack a wizard. Is it intended that a wizard really be able to hold a bridge indefinitely against any number of armies, without expending a bit of strength?

Compounding the above problem is what appears to be a stark lack of playtesting. The most glaring example of this involves Spellbinder's two most spectacular spells. The regeneration spell, "when successfu1, will bring back up to 10 army strength points." The Spellbinder spell, if successful, "immediately moves the spellbinder point counter" - essentially, the measure of a wizard's power - "back up to 25 ." (That is, to full strength.) The cost for either spell is five points. These two are offensive spells. For each, there is a defensive spell which, if thrown, will negate the offensive spell. The cost of either defensive spell is two spell points. Only the player "attacked" may use a defensive spell. Now, "the Regeneration and Spellbinder Spells must always be cast on another wizard or on a army [sic] other than the player's own." In other words, you may only strengthen another player, not yourself, with either of the spells, but the crafty devil may choose to spend two spell points to prevent himself from being strengthened.

Despite the impressive number of names listed in the credits (including five playtesters), I get the distinct impression that this little $\$ 3.95$ game was not felt worthy of the careful design and playtesting most wargames receive before issue. I find it regrettable that Task Force's fantasy games are not living up to the reputation of their other releases.
-David Ladyman
STAR COMMANDOS (Heritage); \$14.95. Figures by Max Carr and David Helber; rules by Arnold Hendrick and David Helber. Eight 25 mm lead figures, paints and brush, one 12 sided die and a four-page painting guide and rules folder. Two or more players; playing time thirty minutes to an hour. Published 1980.

STAR COMMANDOS is a miniatures set complete with the necessary paints and rules. The paints are waterbase, (much easier to deal with than enamels) and come with a small tray and a brush. There are eight figures; a Rebel leader, a female adventurer, a large saurian alien, and a rebel adventurer for the good guys; an Imperial Kright and three stormtroopers for the bad guys. The figures are very "Star Wars-ish." The detail and posing of the figures capture the feeling of space opera.The rules included are very simple. Men may move or shoot. Weapons have ranges and a number they must beat to score a hit.

The complete package concept of STAR COMMANDOS is very convenient, since a a novice won't have to make additional purchases of paints and brushes. The rules are very fast and clean with an emphasis on action. The castings are very nice, especially the Darth Vader-like Imperial Knight.

Problems: the heavy tape covering the paint tray in the box I bought had come loose; the paints had mixed, as well as spattered on the rules. The game system is fast, but very simple, something most gamers could work up in an hour or so. More experienced miniatures players will want to extensively modify the rules or come up with their own. With only four figures per side, battles don't last particularly long, nor is there a lot of variation possible. Finally, and most important, is the question of price. At $\$ 14.95$ this set is overpriced. Even with the generous allowance of a buck a figure, the paints, rules, die, and fancy box aren't worth seven dollars.

While the concept behind STAR COMMANDOS is a good one, I can't recommend it to most gamers because of its high price, -Tony Watson

STARQUEST (OSG); \$3.95. Designed by Ed Curran. One $81 / 2^{\prime \prime} \times 11$ " 4 -page rules folder, $11^{\prime \prime} \times 17$ " mapsheet, $1001 / 2^{\prime \prime}$ die-cut counters, one movement plot sheet for photocopying, ziplock bag. For two to six players; playing time one pr two hours. Published 1980.

In the 22nd century, each of the "great trading Houses" sends a single ship to gain control of a new, unexploited system. Each player commands one of these ships. The players enter the game from hyper-space and slug it out with missiles until only one is left. The game uses two dimensional vector movement on a hex grid. It adds a small gravity well around the sun.

The rules are very clear with only a few negligible typographical errors. Although it requires some getting used to, the plotting/ movement is actually simple. Even with six players, STARQUEST can move quickly. Play
can become very tense, and with two players, it often has the flavor of a duel.

The grid coordinates should have been printed in another color. There is a set of light blue and a set of dark blue counters; they can be confused when both are in use.

STARQUEST requires several games to attain a reasonable grasp of play. It may be easy to plot movement but it is difficult to learn to plan it. The $1 / 6$ chance of destruction in hyper-jump applies to the initial jump into the game. Someone may not make it into the game! The scope of the rules and game itself is very simple, even for small format game.

After you learn it, STARQUEST can give you a challenging, fast game, even with its problems. On a scale of one to ten, it rates as a five.
-Robert D. Buskirk
STRIKE TEAM ALPHA (Gamescience Publications); $\$ 7.00$. Designed by M. Scott Kurtick. 16-page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ rulebook, 8 sets combat tables, 6 strike tearm charts, 1 set weapons effects templates, one $31 / 4^{\prime \prime} \times 45 / 8^{\prime \prime}$ uncut counter sheet, one unit type chart, one $34^{\prime \prime} \mathrm{x}$ $223 / 4$ " double-sized hexsheet, all in ziplock $91 / 4^{\prime \prime}$ x $125 / 8$ " bag. Two players; playing time variable. (Not included, but required for play: 6 and 20 -sided dice.)

Set in the 22 nd and 23 rd centuries, STRIKE TEAM ALPHA simulates tactical infantry combat between three main factions: the felinoid Shaanthra, the reptilian T'Rana, and the everpresent Terrans. Designed primarily as a miniatures game to be played on a three-dimensional playing surface with the Ral Partha Galactic Grenadiers miniatures, STA readily adapts itself to a hex-grid format. Only six vehicles have been included, mainly because Terran powered armor has rendered most obsolete. The combat system is similar to D\&D and TFT, first rolling
to get a hit, and then rolling for damage. The weapons effects templates are used to determine the area affected by certain weapons, like nuclear or sonic grenades. Included are rules for morale and panicked units.

The beauty of the game is that it's completely open-ended, allowing the two players to choose from 11 scenarios which range from 20th Century-type combat with automatic weapons to 23rd Century combat in powered armor on an asteroid. Also, the players can make up their own scenarios. Several bonuses include a time line and general history, a weapons and equipment table giving general descriptions and illustrations and the general use of illustrations throughout the booklet. Also included is a painting guide for the miniatures and a set of tables of organization showing the breakdown of command.

The rules and tables could have been arranged better, with the combat tables separated from the team charts. Also, it is unclear whether or not the Terran marines' grenadier and missilect have to work as a team. These few flaws might confuse someone new to wargaming.

On a scale of one to ten, I'd give STRIKE TEAM ALPHA an 8.6 for an overall rating. I feel it's a good game for the experienced boardgamer who wants to try miniatures. The only problem is the price.
-Patrick V. Reyes

TITAN (McAllister and Trampier, 2416 Grape St., Joliet, IL 60435); \$20.00. Designed by Jason B. McAllister and David W. Trampier. Boxed, with 16 -page $5^{1 / 2 "} \times 8^{1 / 2}$ " rulebook, 7 cardstock battleboards, 17 " $\times 21$ " mapsheet, 6 sheets of 63 units each, 4 dice. 2-6 players; playing time 2-6 hours. Published 1980.

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TITAN is a game about confontations between monstrous forces. Players move, engage in combat, and attempt to muster other monsters while trying to stomp on all of the other players' forces. The sole purpose is to locate and destroy each players" "Titan."

- TITAN is very strong in graphics. The rules are precise without being too formal, and they are laced with cross-references. There is also a section dealing with "Game Etiquette" which reminds players that this is only a game and that they play should be friendly. A nice touch.

Though I compliment the rules, I do not compliment the typeface used to print them. It resembles calligraphy and makes for difficult reading. Also, the counters are beautiful, but they are printed with a water-soluble ink. Laminating the counters or spraying them with a protective coat of fixative will guard them from sweaty fingers.

If you don't mind having a fragile, "bloodbath" game in your collection, TITAN is definitely for you. If you do not care for slaughtertype games, the TITAN will be a little rough, especially for twenty bucks.
-Jerry Epperson

TITAN STRIKE (SPI); \$3.95. Designed by Phil Kosnett. Softpack, with 4 -page $812^{\prime \prime} \times 11^{\text {" }}$ rules sheet, two $81 / 2^{\prime \prime} \times 51 / 2^{\prime \prime}$ sets of combat \& movement tables, $11^{\prime \prime} \times 17^{\prime \prime}$ mapsheet, and 100 die-cut counters. Two players; playing time one or two hours. Published 1979.

TITAN STRIKE simulates the struggle for a monopoly on solar fissionables, taking place between two main factions: the European Economic Community and the Hegemony of Eastern Asia. Conflict takes place on Saturn's largest moon, Titan. The conflict is kept off Terra by a (surprise!) USA-USSR alliance. A tactical land and air game, TITAN STRIKE's forces are comprised of aerial skimmers, drones, hover platforms, infantry units, and TECVs or Titan Environmental Combat Vehicles. Combat is considered simultaneous. Combat and movement alternate between the two players; i.e., the first player moves one unit and then the second player moves one unit, etc. Optional rules include units in ambush, ambush suppression, and drone capture. There are three scenarios.

A few things I liked about the game were the semi-hidden movement system, with TECV/ drone concealment and the alternating movement system; the electronic warfare system, with points allotted to either jam the opponent's frequency or to protect one's own frequency; and lastly, the ammonia flooding rule, where, if the dam is attacked and breached, the Great Ammonia Sea will flood the dry sea bed, destroying any units caught in the raging torrent.

A few things I didn't like about the game were the inability fo hover platforms and other vehicular units to transport infantry; too large of a movement factor on the howitzer unit, making it the most powerful unit on the board; the inability to make combined attacks, due to the alternating combat system; and lastly, the laser cannon, which has no ability to attack land units.

In spite of these minor flaws, TITAN STRIKE makes for a fast-paced and exciting game of tactical warfare in an alien environment. The novice player might have a little trouble with TITAN STRIKE due to the out-ofthe ordinary combat tables and extensive turn phases, but I think the intermediate gamer will find it an interesting change of pace.
-Patrick V. Reyes

ABYSS (FBI); \$1.95. Designed by Paul Creelman. 16 -page $41 / 2^{\prime \prime} \times 7^{\prime \prime}$ booklet. One player; playing time 10-30 minutes. Published 1980.
"ABYSS is based on medieval Christian mythology, and also owes a latge debt to the structure of the ancient Greek underworld. Treasures are usually found in groups of seven, and evil fortune occurs in patterns of three. The foremost quality of the Abyss is a propensity for illusion - the masters, Hermes and Hephaistos, enjoy deception. . . ." So begins your trek for rebirth after your favorite character has died in a Tunnels and Trolls adventure. This is a solitaire adventure about your trip through hell or the ABYSS.

ABYSS is fairly detailed, for a game as small as it is. It is a far step from the first Pocket Adventure, Goblin Lake (reviewed in TSG 28). The adventure is more than a challenge for ANY character that makes the trip. It is well balanced but, more often than not, your character dies a permanent death.

If there are any faults in ABYSS, it is too deadly; it relies on attributes a bit too much for the lower level characters to survive. "If you have an IQ over $18 \ldots$ Otherwise you are charmed into submission in the act of love. The Mark is placed on your forehead, and you are now a servant of the false prophet, with no mind of your own. Close the book."

ABYSS, for all its deadliness, belongs in every T\&T player's library.
-Jerry Epperson

CITIES: A GAMEMASTER'S GUIDE TO ENCOUNTERS AND OTHER RULES FOR FANTASY GAMES (MidKemia Press, 3410 Waco St. No. 1, San Diego, CA 92117); \$6.95. Designed by Stephen Abrams and Jon Everson. One 32 -page $81 / 2^{\prime \prime} \times 11^{"}$ booklet. Fantasy roleplaying Game Masters’ aid. Published 1979.

CITIES helps liven up those routine equip-ment-buying sprees which catch every character sooner or later in the city. There are encounter charts with listings by location, time of day, and of course, random chance. Each one of these types is subdivided into many specialized encounters. Some of the major types include pilgrims, townwatch, adventurers, and so on. There are also several appendices which give worthwhile information on missions, traffic density, occupational background and taverns. The City Catchup Tables allow characters to live week by week finding jobs, investing and even getting married.

The charts are well arranged and easy to use during play. The encounters can liven up any city adventure, and the hundreds of events possible make repetition unlikely. CITIES will fit well into any city structure, whether a packaged scenario or your own design. No single FRP system is used as a base, and so there is little adaptation needed.

The artwork is second rate, but does not detract from the booklet's use. The system used in the City Catchup Tables is complex and takes pencil and paper to keep up with, but is manageable. Of course, not all of the events can be used immediately in any game. The referee must be able to fit them into the situation as logically as possible, which may mean some re-rolling at times.

CITIES is a great addition to any game master's library of fantasy playing aids.
-Richard A. Edwards


CITY OF TERRORS (Flying Buffalo); $\$ 7.00$. Designed by Michael Stackpole. Supplement to Tunnels \& Trolls. 54 -page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ booklet. One player; playing time $1-3$ hours. Published 1978.

Characters go to the exciting and deadly island of Phoron, which houses the City of Terrors. Players must first check into the hotel (a mere 20 gold pieces) and are set free on the island. At most any time, characters may return to the hotel to store loot, exchange a weapon, or gather up their belongings and leave.

This supplement includes many intriguing and interesting "natives" of Phoron - such souls as a tax collector, beggar, medic, and even a vampire. These are wandering monsters which you may meet at any intersection. This game is billed as having 23 possible adventures, each one different and enjoyable.

The only real weak point is that by simply opening a door or making a wrong move, you may end up dead. This can occur without a saving roll.

The entire booklet (except for the cover) is printed on slick glossy paper. The artwork is fantastic. A "reincarnation clause" helps eliminate the "instant death" situations. It is extremely well balanced and worth the money. CITY OF TERRORS is by far the best solitaire game Flying Buffalo has produced yet.
-Tom Gordon
DEATH TEST 2 (Metagaming); \$3.95. Designed by Steve Jackson. 48 -page $4^{\prime \prime} \times 8$ " rulebook, 51 counters, six-sided die, boxed. 1-5 players; playing time 1-3 hours. Published 1980.

This programmed adventure requires the Melee and Wizard Microgames. DEATH TEST 2 can be played solo, or by 1-4 players with a referee; the rules give parameters for both types of games. The adventure is another labyrinth, sponsored by "The Thorsz of Ardonirane." Survivors get to enlist in his army, rank depending on how many labyrinth-dwelling nasties the applicants defeat. Game ends when all are killed, or the survivors emerge from the labyrinth. Usually the former!

DEATH TEST 2 is a lot of fun. Instructions are coherent, explanations clear, and the adventure can be incoporated into an on-going Fantasy Trip campaign. Complete knowledge of the labyrinth is slow in coming, but even after you've played several adventures and have practically memorized the instructions, the fascination remains.

The main drawback is the result of TFT rules the original Death Test lacked. They add sufficient complexity that a substantial amount of game time is given over to rolling up statistics of foes encountered. The idea is to provide variety, but it simply takes too long. Unlike the original Death Test, use of Wizard rules in mandatory. This gives the players less choice as to what kind of adventures they want to have.

The problems are minor, however, compared to the hours of enjoyment DEATH TEST 2 can provide. If you like TFT, you'll like DEATH TEST 2.
-Ronald Pehr

DUNGEON MASTERS ADVENTURE LOG (TSR); \$5.00. 48-page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ booklet. Published 1980.

The DUNGEON MASTERS ADVENTURE LOG contains two formats for record sheets. These allow the DM to keep track of characters and their special abilities, and for recording the monsters they encounter, treasure they find, their marching order; anything the DM might need to know at a moment's glance. Several abbreviations are given in the front of the book for consistency. There are also sections on combat modifiers, surprise, reactions, avoiding encounters, experience point values, and a myriad of other helpful information.

All these tables take up only a few pages at the beginning and end. The rest of the book consists of record sheets. Each page has both types facing each other. There is no flipping back and forth from page to page to find something. The printing is in bold, simple type; no fancy scripts clutter up the page, so the sheets are very easy to read. Plenty of space is provided for almost anything you want to record somewhere. In the centre of the book are illustrations of various types of armour and some of the more unusual weapons (thus allowing the DM to show a picture of a weapon to a player who is not familiar with it).

If there is something left out of the book, we haven't found what it is yet. The only problem is the holes punched in the book (for ring binders). They take out some of the space for writing, just where you needed to squeeze in one more word.

The DM ADVENTURE LOG is an excellent aid for many FRP systems. The simplicity is so complete that DMs will find themselves discarding the sheaf of papers they presently use to record all this information.
-Elisabeth Barrington

THE FANTASTIC WILDERLANDS BEYONDE (Judges Guild); $\$ 8.00$. Designed by Mark Holmer and Bob Bledsaw. Supplement to D\&D. One 32 -page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ booklet and fout $17^{\prime \prime} \times 12^{\prime \prime}$ wilderness maps (two for the judge and two for the players). Two or more players; playing time indefinite. Published 1979.

The vast and dangerous wilderness regions of the Elphand Lands, Desert Lands, Sea of Five Winds, and Lenap are shown in full detail on the judge's maps and are roughly sketched out on the players' maps. The booklet describes and gives the location of many of the villages, castles, islands, ruins, relics, and monsters.

The graphics on the map are beautiful and highly detailed. Many of the encounter areas, ruins, and treasures are quite interesting and imaginative. The basic description of each village is very helpful and saves the judge a lot of preparation time.

The main problem ancountered in the maps is that the hex numbers are difficult to read at times. There are quite a few typos in the booklet and several examples of too much treasure given away for little or no risk.

The judge will have to add a large amount of detail and make a few changes to make the wilderness more interesting. He is given too little detail for too much money.
-Kurt Butterfield

THE MINES OF KERIDAV (Phoenix Games) ; \$5.00. Designed by Kerry Lloyd. One 23 -page, $81 / 2$ " x $11^{\prime \prime}$ booklet. Two or more players; playing time 4 hours. Published 1979.

This fantasy role-playing scenario is designed to be used with almost any FRP system, including Chivalry \& Sorcery, Runequest, D\&D, etc. The adventurers attempt to travel through
the valley of Tiraval to rescue the Princess from the evil wizard Keridav. The booklet contains information on the valley, the town of Farverol, and of course, the mines which are Keridav's stronghold.

The town of Farverol is worked out in extreme detail, including maps of many of the town's houses and details on its main characters. The information stresses details of the valley more than the mines, but as more time is spent getting ready and getting there, this works out well for the Game Master. Instead of wandering monsters, there are ranges of travel set for many of the valley's denizens, which add much to the flavor.

Details of the mines are sketchy in places, but are workable. Unless the adventurers are really sneaky, they will not be able to catch Keridav and rescue the princess before he can flee with her. The conversion of characters and monsters is time-consuming, but not difficult.

THE MINES OF KERIDAV is a step forward. No longer must other FRP systems adapt D\&D-oriented material to theirs. The heavy emphasis on the above-ground adventure is a real bonus over the now-prolific use of underground room to room scenarios. This is a real bonus to any game master's library of adventures.
--Richard A. Edwards

PLUNDER (Chaosium); $\$ 5.95$. Designed by Rudy Kraft. Supplement to RuneQuest. One $81 / 2^{\prime \prime}$ X $11^{\prime \prime}$, 48-page booklet. Published 1980.

About half this book is not very useful. It consists of a shorthand method for generating treasure. (This does nothing to lighten the real work - adding up all those cursed treasure factors.)

The other half describes 43 exotic magic a multi player, hidden movement, Play-by-Mail strategic spare game STARWEB
a game of interstellar conflict and intrigue where fifteen star-spanning empires clash for control of 225 worlds Pirates plunder and foul shipping lanes, Apostles convert populations to their "true" faith, Empire Builders conquer huge sections of the galaxy, Berserkers run amuck and destroy planets, Artifact collectors scramble for ancient treasures, Merchants maintain the balance of
trade . . sometimes

For a copy of the rules and more details, send $\$ 1.00$ (US) to
items, ranging from humble Soup Bones to the fabulous Gazemen's Girdle. The lack of exotic magic items has heretofore been a weak point in RuneQuest. These items have authentic Gloranthan flavor, complete with history and cult affinities. The discreet use of these items will add spice to a campaign without reducing it to Monty Haul.

Recommended to any RuneQuest referee. -Forrest Johnson

RUNEMASTERS (Chaosium); \$5.95. Designed by William R. Keys. Supplement to RuneQuest. $81 / 2^{\prime \prime} \times 11^{\prime \prime} 48$-page booklet. Published 1980.

This supplement includes rules for creating and playing rune masters, and also some data sheets ("Allied \& Bound Spirit Sheet", "Character Worksheet" and others). But the bulk of the book is descriptions of rune priests, rune lords, and rune lord-priests, one each for all of the fifteen cults described in Cults of Prax.

Here is everything you need to know about 45 powerful NPCs of both genders and various races. There are names, characteristics, skills, spells, possessions, geases, everything but personalities. (Presumably, the Chaosium supplies the stats, the referee the personalities.)

Many GMs prefer to create their own NPCs, but this is a time saver.
-Forrest Johnson
SECTOR 57 (Detroit Gaming Center; Box 1321-T; Detroit, MI 48231); \$5.00. Designed by Erick Wujick. 24-page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ fule book, 6 loose $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ pages (two character sheets, background briefing, and information diagrams), $251 / 2^{\prime \prime} \times 11^{\prime \prime}$ judge's shield. For three people (a judge and two players); playing time one hour. Published 1980.

SECTOR 57 is a unique role-playing game or game supplement that pits two astronauts (players) against a strange alien structure guarded by robotic mechanisms. The astronauts must deactivate the structure before it explodes breaking the astronauts, their ship, and the alien structure into individual atoms. The designer states in the introduction that the situation has a "fatality rate of roughly $95 \%$." And he is not far off base.

SECTOR 57 is adaptable to any FRP game on the market; the astronauts given in the game are just glorified Traveller characters. It used ideas from several games, but the effect is better than most. The tension created by the situation of immenent doom lends itself quite well to the game system and anyone who survives the adventure can say that they truly accomplished somethine.

This is an excellently produced and conceived adventure, and praise goes to Erick Wujick for a job well done. The only flaw is the fact that if the characters fail to complete their mission, they are dead. Some people will not appreciate that.

Recommended for those gamemasters who have run out of fresh ideas (or who are particularly sadistic). If this adventure doesn't spark your muse, most probably you are already dead.

Jerry Epperson

SPACEFARERS GUIDE TO ALIEN RACES (Phoenix Games); $\$ 8.00$. Designed by Ed Lipsett. Play aid for use with SF roleplaying games such as Traveller, Space Patrol, Space Quest, etc. One 64 -page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ book. Number of players and playing time variable. Published 1979.

Aliens! You want 'em? Phoenix Games has 'em. 100 (count 'em - 100!) different alien races for use in rolling up player or non-player characters for science fiction role-playing games. In fact, SPACEFARERS GUIDE TO ALIEN RACES seems to have just about cornered the market on aliens, from the insectiod AA to the arachnid Zortanclians, including many of the great alien races from science fiction literature. Each race is comprehensively described (as well as possible on half an $81 / 2^{\prime \prime} \mathrm{X}$ 11" page), noting individual cultural traits and foibles, physical appearance and racial history and other inoformation necessary for a player to become a member of that race. The book also includes charts of racial parameters at the front to help compare the relative strengths and weaknesses of each race, and conversion charts for converting characters from the ALIEN RACES system into the three most popular systems currently on the market - Traveller, Space Patrol, and Space Quest.

The great variety of races covered in this book is striking. Not only are there several types of humanoids to be found in the universe of ALIEN RACES, but there are dozens of totally non-human beings represented, such as the *mmMm*m, a crystaloid race also known as Peterkasa's Rocks (although this race - among others - would prove a bit difficult to play). This is in contrast to most SF role-playing systems' near-neglect of aliens.

There are a few bugs (not the Heinlein variety, either) to be found in ALIEN RACES, however. The problem of how to translate most of the aliens' special characteristics into game terms is left entirely up to the referee. A little thought will solve most problems this may cause, though some of the more exotic alien offerings may stump even the most ingenious

of gamemasters. (Just how does one transport a planet-encircling Shen aboard a Scout ship?) Traveller players may have some difficulty with the conversion tables - the Traveller table only converts for characters with rolled characteristic values from 2 to 12, while Traveller itself allows for players to conceivably raise their attributes up to 15 (or lower them to 1 ) while in the service. A few graphic and layout errors mar the book, too: the racial parameters chart begins on page 9 and ends on page 6 (with no explanation), and some of the illustrations don't exactly match the designated race as described in the text.

If a myriad of alien races from which to choose a character for your next SF role-playing session is your cup of zgwortz, SPACEFARERS GUIDE TO ALIEN RACES should easily suit you as well as a tentacle does your typical BEM.
-William A. Barton

SPACEFARER'S GUIDE TO PLANETS: SECTOR TWO - ROURKE'S DIADEM (Phoenix Games); $\$ 8.00$. Designed by Ed Lipsett. Play aid for use with SF role-playing games such as Traveller, Space Patrol, Space Quest, Starships and Spacemen, etc. One 72-page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ book. Number of players and playing time variable. Published 1979.

Like its predecessor, SECTOR TWO is a book of pre-generated, completely described planets for use in your SF role-playing campaign. Unlike Sector One, however, ROURKE'S DIADEM doesn't consist of the planets of science fiction literature, but rather is a group of totally original worlds, organized into competing factions and set against the backdrop of a nearby globular cluster. Featured with the individual planetary breakdowns is a complete history of the society and cultures found within the boundaries of the Rourke's Diadem cluster, including that of two rival religious groups, the Brotherhood of Tarl and the Judges of Shildai; the Imperial House of Cavoral (the ruling government); the various clubs, guilds, and associations of the cluster, such as the University of Zacania, the Mercenary Guild, and the Artifact Collectors Club; and the various trading companies conducting business in the area. The book also has three space encounter tables for use when in Imperial, Tarl, or Shildai space.

The nicest feature about ROURKE'S DIADEM is the wealth of detail concerning the worlds and attendant societies. The planets are just as detailed - if not as familiar - as those in Sector One. And it's very easy to get a feel for the society of the cluster in general from the historical notes presented. ROURKE'S DIADEM will prove to be even easier to work into your own campaign than Sector One, no matter what SF role-playing system you prefer, as the Diadem is set up as a neighboring Empire to the Imperium, the Confederation, or whatever group controls your universe.

ROURKE'S DIADEM shares Sector One's problem in being a bit too "universal" so as to fit many systems. It's less of a problem here, though, thanks to the neighboring Empire theme. Still, Traveller players will probably find themselves more at home in SECTOR TWO than players from other systems.

I see no reason not to add SPACEFARER'S GUIDE TO PLANETS: SECTOR TWO ROURKE'S DIADEM to your SF role-playing collection, along with its companion volume unless your problem is agoraphobia, and the universe's big enough for you as is.
-William A. Barton

TREASURY OF ARCHAIC NAMES (Judges Guild); $\$ 4.95$. By Bill Owen. 64 -page $81 / 2^{\prime \prime} \times 11^{\prime \prime}$ booklet. Published 1979.

This book is subtitled "Olden Names, Nicknames, Titles, Town \& Tavern Names for Fantasy and Science Fiction Role-Playing Games." That pretty well tells the story. This is a collection of name-lists, keyed to percentile dice numbers. The game master can go through the list to find interesting names - or just roll dice and see what he comes up with.

A very interesting piece of work. The introductory sections on naming are just as useful as the actual lists. This is not the typical unimaginative collection of trivia that one often
finds sold as "D\&D charts" - it is well-researched and thought out. A small but useful bibliography is included.

The author has limited himself to AngloSaxon names and terms. This rather limits the usefulness of the book to fantasy gaming, rather than science fiction gaming . . . and a GM with an Oriental world (for instance) won't get much help here. Perhaps the projected Volume II will fill some of the gaps.

Not much use to players who don't also referee. Recommended for referees who take their naming seriously - it'll be worth the investment.
-Steve Jackson

## TSG BACK ISSUES

Did you miss an article you wanted to read? Some back issues of TSG are still available:

No. 15. Wizard and Olympica designer intros; Robotics in Traveller; Floating Hulks; Ogre Update; Orcs and their Weapons; computer gaming.
No. 16. WarpWar article; Classics Simulated in Melee; Alpha Omega; Demons! (Moties in Melee); 1977 game survey results - and a LOT of reviews.
No. 17. GEV designer's intro; strategy for Chitin: I; variants for Imperium, Melee, and a combination Ogre/Rivets variant; WarpWar fiction.
No. 18. IceWar designer's intro; variant scenarios for Invasion: America and War of the Ring; additional equipment for Traveller; mounted Melee; "Referee, Declare Thyself!" (role-playing GM technique).
No. 19. POND WAR; variant units and scenarios for GEV; combining Imperium and WarpWar; Battlefleet Mars variant; reviews of Swords \& Sorcery, Runequest, and Raumkrieg; MicroGame design article.
No. 20. Olympica tactics; Psionics in Traveller; TARTARS \& MARTYRS; Reality in Melee; designer's optional rules for Ice War; designer's article on Starships \& Spacemen; "Rip-Off Blues" (wargaming frauds).
No. 21. Interview with Dave Arneson; running a MicroGame tournament; tactics for Ogre and GEV; spaceship miniatures; Black Hole variant rules, putting the Deryni into Melee; more reviews.
No. 22. Ice War tactics; Black Hole physics; PARTY BRAWL; 1978 SF/fantasy game survey results; Fantasy Trip short story.
No. 23. Invasion of the Air Eaters designer's article; Ogre meets Ice War; Sticks \& Stones expansion; Vikings and Valde in The Fantasy Trip.
No. 24. Black Hole designer's intro; "The Psychology of Wargaming"; Naval Melee; "The Four-Howitzer Defense in Ogre"; variants for Chitin: I, The Creature that Ate Sheboygan, and John Carter of Mars.
No. 25. Stellar Conquest issue . . . designer's article, tournament tactics, and variant scenarios. Also - strategy in Rivets; benefit-cost analysis for Ice War; "Everyday Life in The Fantasy Trip."
No. 26. Oneworld designer's intro; tactics in GEV; variations on Wizard; computers in wargaming; Life-sized Melee; and a variant that puts human forces into Rivets.
No. 27. Hot Spot's designer's intro; Time Travel; Nuke the Air Eaters (gaming atomic war); Weapons for Hobbits in TFT; Muskets in TFT; Game Design Part 1;5 pages of game reviews.
No. 28. 1979 Game Survey results; Overmen in TFT; A Guide to SF/Fantasy Game Publishers; Task Force Games report; Writers' and Artists' guides; 7 pages of reviews; Game Design Part 2; Deus Ex Machina.
No. 29. Fantasy Trip designer's intro; Painting Fantasy Miniatures; Fantasy and SF game magazines surveyed; Game Design Part 3; more Deus Ex Machina; 7 pages of reviews.
No. 30. KUNG FU 2100; Painting Fantasy Miniatures Part II; Index to Game Articles; Game Design Part 4; Programmable Calculators; 10 pages of reviews.
No. 31. "Sam Beowulf"; 1980 Game Software survey; Game Design Part 5; Random Maze Generation; 9 pages of reviews.
No. 32. Traveller issue ... Alternate Character Types, reviews of play aids, scenarios, and variants; also Game Design Part 6; Deus Ex Machina; "Minus Two Reaction" software survey update; Yaquinto Games report; 9 pages of reviews.
No. 33. Play-by-mail issue . . . Feature reviews of four PBM games, a Warp War Campaign, Survey of PBM companies; also Contest Report; Company Report from Schubel and Son; "End Game;" GEV scenario; Game Design Part 7; Deus Ex Machina; and 10 pages of reviews.
Send $\$ 2.00$ per copy, plus 50 cents per order for postage and handling, to TSG, Box 18805, Austin, TX 78760.

If you are a TSG subscriber, you can get discounts on back issues. Use the order form on the mailer cover of your subscription copy.

THE WORLD OF GREYHAWK (TSR); $\$ 10.00$. Designed by Gary Gygax. $9^{\prime \prime} \times 12^{\prime \prime}$ folder, two $35^{\prime \prime} \times 23^{\prime \prime}$ map sections, 32-page $81 / 2$ " X 11" "Gazetteer." Published 1980.

THE WORLD OF GREYHAWK is a complete, ready-to-play world for a DM to set up a campaign (or several) in. The map is in two halves; the Gazetteer is a booklet with a com+ plete description of all the symbols used, as well as monsters, populations, land masses, history, government, etc. of the world.

When I first saw the module as it came in the mail, my reaction was, "Good heavens!" I was struck by the beautiful artwork on the cover folder, bearing the arms of all the principal persons and organizations of the world. The map is even more beautiful, in full color, and everything is clearly marked and named. Everything is thought of for descriptions in the booklet; I doubt if most campaign worlds are this complete (mine certainly isn't).

Though the map would have been difficult to package in one piece, that would have made laying it out a bit easier. It is almost too large. We didn't have enough table space for it; it had to go on the wall or the floor. The book is printed in small type. It gives you a headache if you are trying to study some aspect of Greyhawk for any length of time.

This is an example of how to organize a world if you are a "completeness" fanatic. Even if you don't use this particular world, it will help you get started on one of your own.
-Elisabeth Barrington

## COMPUTER GAMES

B-1 NUCLEAR BOMBER (Microcomputer Games); $\$ 15.00$. Boxed, with full-sized plastic holder for the cassette and a 1 -page rules fold-
er. The cassette contains all the programs needed for the TRS-80, Apple II, and the PET. One player; playing time $10-20$ minutes. Published 1980.

You are a B-1 bomber pilot out of Thule AFB. You are assigned a primary target (and several alternate ones) in the USSR. You are also given a code which later is needed to arm your only bomb. To begin with, you must input the course and altitude desired (the computer gives you the course to the target). Autopilot is used to speed play. Your navigator tells you the course and distance to anywhere. Also, a search command will tell you if any Soviet Defense Complexes are nearby. These complexes will launch MiGs and SAMs at you as you travel by. Status lets you know if you are running out of fuel. There are three defenses available. ECM is your first line of defense, but is good for only a limited number of times. Phoenix missiles will knock out anything within range, but their numbers are limited. Lastly there is evasive action. The only other actions available are to arm and to release your bomb (if within range, it automatically hits).

The game is really rather simple, and not up to the state of the art in computer gaming. There are no graphics of any kind, just a simple scrolling of information. Your options are limited and there is only one level of play. Also, it is a straightforward win or lose (you make it back or not).

Overall, I feel that the $\$ 15$ price tag is too high and the game is quickly boring. The big fancy box is a waste and although putting all three languages on one tape is an innovative idea, two-thirds of what you bought is wasted. I expected more from Avalon Hill's baby but was disappointed. I hope their other new games are better.
-Larry Kerns

BILL BUDGE'S SPACE ALBUM (California Pacific); $\$ 39.95$. Four machine language programs for the Apple, 32 k One or two players; playing time varies.

Death Star, the first game, puts you in Luke Skywalker's cockpit, as he makes his run down the trench, trying to destroy the Death Star. Asteroids is patterned after the popular arcade game.

Tail Gunner is a line-'em-up-and-shoot-'em game.

Solar Shootout involves two starships trying to kill each other, hampered by the huge sun in the middle of the screen. This is a version of "Computer Space" or "Spaceman," which have been around for at least ten years.

The first three games are very entertaining. Graphics and sound effects are first rate. There are several skill levels to choose from.

I recommend this package to any arcade game fan with an Apple and $\$ 39.95$ to spend.

- Alan Isabelle


WINGED SAMURAI (Discovery Games); $\$ 19.95$. 16 K cassette by David Wesley and Stephen Gross for the Apple II, TRS-80, and PET, phexed. One player; two levels of difficulty; playing time 10 minutes. Cannot be saved. Published 1980.
(This is written in assembly language, with programs for three computers on the same cassette. It can be difficult to load, despite the helpful instructions which are included.)

If you liked the book Samurai! you will probably like this game. The player commands 16 Japanese fighters. His mission - to destroy incoming bombers before they can reach Rabaul.

The historical detail is excellent. The player has his choice of 13 different Japanese fighters. The enemy forces are randomly selected from


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the Allied aircraft correct for the period. Individual performance capabilities are taken into account. (Attacking Wildcat escorts behave differently from Corsairs.) The 22 possible combat orders allow some variety of strategies.

Unfortunately, in creating this historical authenticity, the programimer sacrificed the game to the simulation. The display is purely two-dimensional, and the graphics are unimpressive. (Diving 3,000 feet, your Zeros attack a flight of B17s . . . but all you see is a little sign in the middle of the screen.) The game is not real time. You can take all day to make your combat decisions. Also, for twenty dollars, Discovery Games should have been able to include some illustrations and specs. Without them, the game seems highly abstract.

Recommended to historical aviation gamers. -Forrest Johnson

## WRITING REVIEWS FOR THE SPACE GAMER

## Capsule Reviews

Most of the reviews we print will be "capsule" reviews - 400 words or less. We pay $\$ 5$ for each capsule review accepted. We want to run a review for every new s-f or fantasy game or supplement. During 1980, we'll also accept reviews of older games.

Each capsule review should be five paragraphs long and contain:
(1) Basic information. Present these facts, in this order: NAME OF GAME (Publisher); price. Designer. (If applicable: "Supplement to ---," "Companion to ---," or similar note.) Format: list of components, with sizes of maps and rulebooks, number of counters, etc. Number of players; playing time. Publication date.
(2) General description of the game: background, the sides, course of play, special features, etc.
(3) Strong points. Discuss what is good about the game; in every game, there IS something worthwhile. Don't try to be Pollyanna just point out the game's successes.
(4) Weak points. Every game has its problems, too. If the only faults you can find are minor ones, say so. If the game is fatally flawed, come right out and SAY SO. If you can phrase your criticisms as suggestions for improvement, do so.
(5) Summation. Your overall opinion of the game. Who should and should not buy it, and why.

All reviews must be signed; the reviewer's name will be printed. No game may be reviewed by its designer or by an employee of the publisher. (Designer's articles are welcome, but must be billed as such!) Final note: If you can write a complete review in less than the full 400 words, by all means do so.

This review format is designed to encourage fairness and to give the reader enough information to let him decide whether he wants to buy that game. Keep that in mind when you write. This is a short review, not a complete analysis. For those who want to write longer reviews, each issue will have one or two -

## Featured Reviews

These will be game reviews 1,000 to 2,000 words long. They should contain all the above information, plus whatever else the reviewer wants to say. They may be written in any format. A featured review may cover either a new game or one that has been on the market for some time. If TSG has not already printed a capsule review, write one and submit it at the same time. We may even use both.

is killing monsters, finding treasure, braving danger, joining quests, conjuring magic. and exploring the unknown the romance and mystery life should be. THE FANTASY TRIP frees yout imagination for an evening of fun and adventure. It's the role-playing game for the 80 's the one you've waited for.

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I am writing to express my regret over the path that I see The Space Gamer taking. When I subscribed (issue no. 1) I was looking for a professional (or at least semi-professional) magazine devoted to the field of science fiction games. I had subscribed to other magazines (most notably the late Supernova), but with the arrival of The Space Gamer I thought I had found what I was looking for. Indeed, I was quite happy with the magazine up until recently.

Then you announced your policy of covering science fiction and fantasy, the fantasy to a much greater extent than before. Now, I am not one who is against fantasy, but there are other magazines that do a good job of covering different aspects of that field (The Dragon, Wyrm's Footnotes, White Dwarf, etc.).

I already think the magazine has far too much fantasy; it has become in my opinion fantasy-oriented. Let us take issue number 31 for example: I count 11 pages of fantasyrelated material, 4 pages of magazine related stuff (table of contents, letters, etc.), 1 page of theory, $51 / 2$ pages of computer-oriented stuff, and only about 2 pages of science fiction material (non-computer; I realize that this was your special computer issue, but I can't bring myself to include that in with the science fiction), and all of those capsule reviews. Even your sub-title betrays your leanings: The Magazine of Adventure Gaming!!

I would like to make a plea for you to go back to the almost pure science fiction magazine I once knew. Such a publication would fill a need in the hobby rather than being just another in a long list of fantasy gaming magazines.

Jon Vavrus
Pasadena, CA

Mr. Armintrout's Deus Ex Machina program looks good, but his original formula for LOS is wrong.

$$
\begin{aligned}
& \stackrel{H}{\bar{D}} \geqq \frac{h p-5}{\bar{d} p} \text { allows anybody on ANY height } \\
& \text { to fire over ground level men to further ground }
\end{aligned}
$$

level men. This assumes man height $=5$ feet. (In other words, a guy standing on a 1 foot high stump can shoot 20 miles over the heads of a dozen divisions to pick off an enemy.)

The equation should read:

$$
\frac{\mathrm{H}+5}{\mathrm{D}} \geq \frac{\mathrm{hp}}{\mathrm{dp}}
$$

Actually, this error was originally committed by SPI, but Mr. Armintrout should have checked it before making up a big program to carry it out.

Jon Mishcon
Franklin, NH

The Space Gamer just keeps getting better and better, Last issue's Kung Fu 2100 was a lot of fun, and this issue's (no. 31) "Sam Beowulf" by Joseph Miranda is certainly the funniest spoof I'm going to read this month. It made me wish I had written it myself - which doesn't happen often enough, lemme tell ya. The illustrations were exactly appropriate, and even the old pulp-style typeface helped the overall effect. Thanks.

The capsule reviews are fine and very informative; "Game Design: Theory and Practice" is your most fascinating feature; and the protective mailing cover is nice, too. Congratulations on an ongoing achievement.

Allen Varney Reno, NV

Scanning the contents of Issue 31, I came upon a disquieting calculation: there were exactly three articles in the magazine, for a grand total of seven pages. The rest was some type of survey or review or the various baggage trains associated with a magazine.

It's not that I think that reviews are such a bad thing, but when the creative material content of a magazine is less than $25 \%$, there's something wrong. Part of it 1 would judge to be the baggage - advertising might be necessary, but it's irritating; more pertinently, there is a lot of baggage that is generated by the magazine itself and does not produce any income. I would say that there is more of this type of baggage than is normal, or healthy.

I should hate to think of someone who had neither an avid interest in game design nor in computers (any one with an avid interest is beyond your columns), and didn't like the Beowulf piece.

Frank B. Weir, Jr.
Kelley, Iowa

## (To Bruce Webster)

With respect to the reviews which you wrote for The Space Gamer, I do want to compliment you on both the thoughtfulness and depth with which you approached each of these programs. One of the problems that we as software designers frequently encounter is that we are unable to get helpful feedback on the impact of our programs in a way which allows us to do substansive revision. The program reviewer for us serves this need in perhaps the best way possible.

With respect to Space particularly, we are in agreement with you that at some juncture in the very near future, Space should be withdrawn from the market. You should know from a historical point of view that Space was the very first Edu-Ware product released on the market more than a year ago. A year ago, this product met with a tremendous reception from software purchasers. It represented a whole new approach to gaming software which was then available. Today, when positioned against other of our products and the quality products of other companies, Space indeed does look pretty tame.

The dilemma we face at this time is the question of whether there is sufficient potential in the Space series to write a major third set of programs in the series and to do a complete revision of Space I and Space II.

If we believe the game to have sufficient potential, we will undertake this developmental process in early Spring of next year. On the other hand, since Edu-Ware is primarily focused on the development of real world simulations and instructional software, we may elect to withdraw this product series as being obsolete and not worth the resurrection effort. We would be interested in having your comments about the potential you see for major revision and addition as meeting the current needs in the science fiction/personal computer marketplace as you know it.

In any event, we thank you again for the time and effort which you devoted to these reviews and compliment you on the clarity and insightfulness which you demonstrated in your writing.

Sherwin A. Steffin
President
Edu-Ware Services, Inc.

## Reader Ads

Reader ads are available to individuals (not to companies). $\$ 5$ per insertion; limit 20 words or four lines.

Swordplay - game of fantasy combat. Create fighters, arm them, and engage them in battle with warriors and monsters. $\$ 6$ - Alan Isabelle, Northgate Rd., Mendham, NJ 07945.

Conquest of Space - SF boardgame. The basic game is easy to learn and optional rules add to the fun of this interstellar strategy game. $\$ 8$ - Alan Isabelle, Northgate Rd., Mendham, NJ 09745.

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FALL 1980 ISSUE: Harlan Ellison's "Memoir: I Have No Mouth, And I Must Scream;" Interview: George R.R. Martin; Michael Bishop's "In Pursuit of Ubik;" Vincent DiFate interviews Paul Lehr (color cover this issue by Lehr); plus Wood, Silverberg, Stewart, etc.

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## News \& Plugs

Strategic Simulations, Inc. has introduced two computer strategy games. Both can be played as two-player games or with a computer-as-opponent feature. Both are available on disk for the Apple with 48 K memory and Applesoft Basic. Computer Napoleonics: The Battle of Waterloo is a recreation of Napoleaon's last battle against the Duke of Wellington, and costs $\$ 59.95$. Computer Quarterback is a football strategy game played in realtime; it costs $\$ 39.95$.

Superior Modets is producing a "recognition manual" for its ships. There will be illustrations and specifications for each ship, incluđing figures for dimensions, crew, protection, sensors, and other matters.

Metagaming's $\$ 10,000$ Treasure of the Silver Dragon hunt ended in mid-September. Austin, Texas resident Thomas Davidson, a University of Texas chemistry PhD candidate, bought the game on September 15 th, spent three days sorting clues, flow-charting, and breaking the code, and determined the site of the hidden $31-$ oz. silver dragon as being the solar observatory at Sunspot, NM. Thomas and wife Sharon travelled to the site the next Saturday and retrieved the dragon, winning it and the $\$ 10,000$ pot. In a fine show of chutzpah, Thomas left his shovel with the word "Eureka" written in the game's code in the hole where the dragon had been buried.

Metagaming head Howard Thompson has announced plans for the release of Unicorn Gold, another $\$ 10,000$ giveaway/game, for mid1981, and plans for a third contest to follow.

The Treasure of the Silver Dragon is a TFT solo adventure. The real silver dragon was one of two such miniatures cast by Martian Metals for this contest; the other dragon was kept in Metagaming's possession.

# The Good Guys by JD 



Avalon Hill is working on a computer adventure game to be called Lords of Karma, 32K in machine language for the Apple.

C-T Simulations is offering the PBM game Star Cluster Omega. Setup is $\$ 10$ and includes two $\$ 3$ turns. Contact P.O. Box 174, Friendswood, TX 77546.

Chester Hendrix relates that Game Designer's Workshop's Marc Miller announced at PacifiCon, plans for several new Traveller supplements and updates. These include:

Book 5: High Guard, 2nd Edition.
Adventure 3: Twilight's Peak will include alien character generation tables.
Adventure 4: Leviathan (aka "Whales in Space") features an enormous Imperial warship.
Supplement 6: 76 Patrons includes statistics for each of the 76, and a scenario for each.
Supplement 7: The Emperor's Fighting Ships features data and deck plans on nine boats.
Book 6: Grand Survey (tenative title) expands character generation information, especially on Scouts.
Supplement 10: Solomani Rim features the Solomani Sector, including the Terran subsector.
Supplement 11: Forms \& Charts features charts, record sheets, and some new items.

Phoenix Games offers a game master's screen for Bushido. The price is $\$ 2$.

Game Designer's Workshop is considering holding a tournament for ' 81 called the Billion Credit Squadron. Entrants would build, using one billion credits, High Guard rules, and certain other specifications, an entire squadron and bring it to the tournament,

## Calendar

January 16-18, 1981: USACON 3. Gaming con for SF\&F, RP, and boardgaming. University of South Alabama in Mobile, AL. Contact Leo Vaulin, 5865 Lisloy Dr., Moblie, AL 36608.

February 14-16, 1981: DUNDRACON VI. FRP gaming con, Oakland, CA. Contact @ 386 Alcatraz Ave., Oakland, CA 94618.
March 13-15, 1981: COASTCON. Royal D'Iberville. Contact Coastcon 81, PoO. Box 6025, Biloxi, MS 39532.
March 20-21, 1981: SIMCON III. Con for fantasy role-playing games. University of Rochester in Rochester, NY. Contact SIMCON III, Box 5142, Rochester, NY 14627.

May 22-25, 1981: GRIMCON III. F/SF gaming con, Oakland Hyatt House, 455 Hegenberger Road, Oakland, CA 94612. Contact P.O. Box 4153, Berkeley, CA 94704.
July 3-5, 1981: ORIGINS '81: To be held in Dunfee Motel in San Mateo, CA. More information upcoming.

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For true, Terrans. A whole line of incredibly detailed 15 mm figures especially designed for TRAVELLER ${ }^{\text {M M }}$ adventures. Thugs and ruffians, aliens and Imperial Marines, adventurers and more. You might think it was too good to be true, but it is. (Would a Martian lie?)

After all, they're only metal...Martian Metal.

# Martian Metals 

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